

2020~2021 | Short Form Selection Guide DC/DC Converters AC/DC Power Supplies



Company Profile

TRACO Electronic AG is a Swiss company headquartered in Baar, Switzerland. As a leading power supply specialist with more than 40 years experience, we are dedicated to the design and manufacturing of high quality DC/DC and AC/DC power conversion products.

TRACO markets its products worldwide under the registered trademark TRACO POWER. Our mission is to provide our customers with optimal power supply solutions in terms of performance, quality and cost for their individual application.










Product Range

TRACO POWER's product range focuses on four vertical markets: **Industrial, Medical & Healthcare, Railway / Ruggedized, and Building Technology & Household.**

Within these markets TRACO offers one of the most comprehensive programs for standard products in application areas such as: **Test & Measurement, Automation & Control, Robotics, Machinery, Therapy, Diagnostic, Laboratory, Home & Office Automation, White Goods, Transportation, Construction & Farming, Information Technology, Smartgrid, Renewable Energy, Oil & Gas.**

Detailed product data can be downloaded from our website: www.tracopower.com

Icons used throughout the catalog

-  Product certified to IEC/EN/ES 60601-1 3rd edition for 2×MOPP and BF rated applications, EMC according to IEC 60601-1-2 4th edition and risk management file according to ISO 14971. Supported by a 5 year Warranty.
-  Ruggedized DC/DC converters with EN 50155 approvals for railway applications, shock and vibration test according EN 61373 and qualification for the fire behavior of components according to EN 45545-2
-  Building Technology / Household product certification according to IEC/EN 60335-1
-  UL508 Listed for Automation applications
-  Hazardous location certified to ATEX and UL Hazloc
-  Safety approved for Class II applications where no earth ground is required
-  ErP READY - high efficiency and low "no-load" power consumption
-  Optional heatsinks available
-  Available Din Rail Mounting kit

UL 62368-1 - Effective December 2020

The upcoming discontinuation of the IEC/EN/UL 60950-1 by December 20, 2020 and the associated transfer to the new IEC/EN/UL 62368-1 impacts many different industries including the power supply industry in which we are operating in.

Traco Power has made a great effort to upgrade nearly all our product families to the new standard before the December deadline. Only older series which could not meet the new requirements without a major design change, or series which were bound to become NRND shortly weren't transferred to the new standard. However, for those products possible replacements or alternative series are already available.

Please check our website for the latest status and the most current product datasheet and safety documentation.

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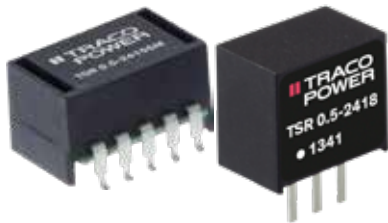
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NON-ISOLATED REGULATORS

0.5 - 30 AMPS

0.5 Amp **TSR 0.5(SM)**

- 0.45 × 0.30 × 0.40" - SIP-3 Package
- 0.60 × 0.49 × 0.38" - SMD Package (suffix SM)
- +4.75 ~ 32 V_{IN} / +1.5 ~ 15V_{OUT} with 73 ~ 97% Efficiency
- -40°C to +90°C Operating (Derate 5%/K > +80°C)
- SIP-3 models are LM 78xx pin-compatible



0.6 Amp **TSR 0.6WI**

- 0.47 × 0.34 × 0.53" - SIP-3 Package
- Extremely wide 8:1 input range (9 ~ 72V_{IN})
- +3.3 ~ 24V_{OUT} with 85 ~ 94% efficiency
- -40°C to +85°C Operating (Derate 3.57%/K > 77°C)
- SIP-3 models are LM 78xx pin-compatible

NEW!



1 Amp **TSN 1**

- 0.65 × 0.46 × 0.30" - SIP-3 Package
- -7.0 ~ -32 V_{IN} / -5 ~ -15V_{OUT} with 84.5 ~ 93.5% Efficiency
- -40°C to +85°C Operating (Derate 3.3%/K > +70°C)
- LM 79xx pin-compatible



1 Amp **TSR 1E**

- 0.46 × 0.40 × 0.30" - SIP-3 Package
- 6 ~ 36V_{IN} / 3.3 ~ 5V_{OUT} with 88 ~ 92% Efficiency
- Cost Optimized Design
- -40 to +85°C Operation
- Short circuit protection
- LM 78xx pin-compatible

NEW - UNDER DEVELOPMENT



1 Amp **TSR 1(SM)**

- 0.46 × 0.40 × 0.30" - SIP-3 Package
- 0.60 × 0.37 × 0.30" - SMD Package (suffix SM)
- +3.0 ~ 36 V_{IN} / +1.2 ~ 15V_{OUT} with 74 ~ 96% Efficiency
- -40°C to +85°C Operating (Derate 2.4%/K > +60°C)
- SIP-3 models are LM 78xx pin-compatible



1 Amp **TSR1 WI**

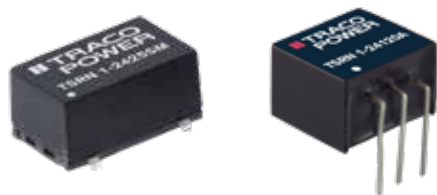
- 0.65 × 0.46 × 0.30" - SIP-3 Package
- Extremely wide 8:1 input range (9 ~ 72V_{IN})
- +3.3 ~ 24V_{OUT} with 83 ~ 93% efficiency
- SIP-3 models are LM 78xx pin-compatible
- -40°C to +80°C Operating Temperature

NEW!



1 Amp **TSRN 1(SM)**

- 0.46 × 0.40 × 0.30" - SIP-3 Package
- 0.60 × 0.37 × 0.30" - SMD Package
- +4.6 ~ 42 V_{IN} / +1.5 ~ 15V_{OUT} with 77 ~ 96% Efficiency
- -40°C to +85°C Operating (Derate 2.86 %/K > 65°C)
- Suitable for positive to negative output circuit
- LM 78xx pin-compatible
- Wide V_{OUT} Trim Range



2 Amp **TSR 2**

- 0.55 × 0.40 × 0.30" - SIP-3 Package
- +3.0 ~ 36 V_{IN} Ranges
- +1.2 ~ 15V_{OUT} with 84 ~ 96% Efficiency
- -40°C to +85°C Operating (See Spec for Derating)
- LM 78xx pin-compatible



3 Amp **TSR 3**

- 0.65 × 0.41 × 0.24" - SIP-5 Package
- +2.5 ~ 30 V_{IN} Ranges
- +0.6 ~ 5V_{OUT} with 91 ~ 95% Efficiency
- -40°C to +85°C Operating (Derate 1.5%/K > +50°C)
- Negative or positive outputs
- Remote On/Off



ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

1 Watt

TBA 1

- $0.48 \times 0.38 \times 0.24''$ - SIP 4 Package
- Next Gen cost optimized design
- $\pm 10\%$ Input (3.3 / 5 / 12 / 24 VDC)
- Single 3.3~15V_{OUT} with 73~82% Efficiency
- -40°C to +95°C Operating (Derate 5%/K > 85°C)
- 1,060 VAC I/O Isolation
- Short Circuit Protection
- Unregulated Outputs



NEW!

1 Watt

TBA 1E

- $0.76 \times 0.37 \times 0.24''$ - SIP 7 Package
- Next Gen cost optimized design
- $\pm 10\%$ Input (4.5~5.5 | 10.8~13.2 | 21.6~26.4 VDC)
- Single / Dual 5~15V_{OUT} with 79~82% Efficiency
- -40°C to +95°C Operation (Full Load)
- 1,060 VDC I/O Isolation
- Short Circuit Protection
- Unregulated Outputs

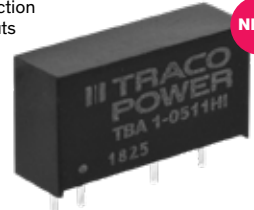


NEW!

1 Watt

TBA 1HI

- $0.76 \times 0.37 \times 0.24''$ - SIP 7 Package
- Next Gen cost optimized design
- $\pm 10\%$ Input (4.5~5.5 | 10.8~13.2 | 21.6~26.4 VDC)
- Single / Dual 5~15V_{OUT} with 79~82% Efficiency
- -40°C to +95°C Operating (Derate 5%/K > 85°C)
- 3,000 VDC I/O Isolation
- Short Circuit Protection
- Unregulated Outputs



NEW!

1 Watt

TDN 1W1

- $0.52 \times 0.36 \times 0.40''$ - DIP Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~81% Efficiency
- -40°C to +90°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Fully Regulated



1 Watt

TDN 1WISM

- $0.52 \times 0.36 \times 0.40''$ - SMD Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~81% Efficiency
- -40°C to +90°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Fully Regulated



1 Watt

TEA 1

- $0.46 \times 0.40 \times 0.23''$ SIP 4 Package
- $\pm 10\%$ Input (4.5~5.5 VDC)
- 5 VDC output (single) with 78% efficiency
- -40 to +85°C Operation
- 1,500 VDC I/O Isolation
- Compact and cost optimized design
- Unregulated



NEW!

1 Watt

TEA 1E

- $0.77 \times 0.40 \times 0.23''$ SIP 7 Package
- $\pm 10\%$ Input (4.5~5.5 VDC)
- 5 VDC output (single) with 78% efficiency
- -40 to +85°C Operation
- 1,500 VDC I/O Isolation
- Compact and cost optimized design
- Unregulated



NEW!

1 Watt

TEA 1HI

- $0.77 \times 0.40 \times 0.23''$ SIP 7 Package
- $\pm 10\%$ Input (4.5~5.5 VDC)
- 5 VDC output (single) with 78% efficiency
- -40 to +85°C Operation
- 3,000 VDC I/O-I/O Isolation
- Compact and cost optimized design
- Unregulated



NEW!

1 Watt

TES1

- Singles: $0.54 \times 0.31 \times 0.28''$ - SMD Package
- Duals: $0.64 \times 0.31 \times 0.28''$ - SMD Package
- $\pm 10\%$ Input (4.5~5.5 | 10.8~13.2 | 21.6~26.4 VDC)
- Single / Dual 3.3~15V_{OUT} with 73~80% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K > +75°C)
- 1,500 VDC I/O Isolation
- Unregulated



1 Watt

TES 1V

- $0.64 \times 0.31 \times 0.31''$ - SMD Package
- $\pm 10\%$ Input (5 / 12 / 24 VDC)
- Single / Dual 3.3~15V_{OUT} with 72~81% Efficiency
- -40°C to +85°C Operation (Derate 4%/K > +75°C)
- 3,000 VDC I/O Isolation
- Unregulated



1 Watt

TMA

- $0.77 \times 0.40 \times 0.24''$ - SIP-7 Package
- $\pm 10\%$ Input (5 / 12 / 15 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 71~81% Efficiency
- -40°C to +85°C Operation (see spec for derating)
- 1,000 VDC I/O Isolation
- Unregulated



1 Watt

TME

- $0.45 \times 0.4 \times 0.24''$ - SIP-4 Package
- $\pm 10\%$ Input (3.3 / 5 / 12 / 24 VDC)
- Single 3.3~15V_{OUT} with 70~80% Efficiency
- -40°C to +85°C Operation (Derate 4%/K > +75°C)
- 1,000 VDC I/O Isolation
- Unregulated



ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

1 Watt

TMR 1

- 0.67 × 0.40 × 0.30" - SIP-6 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT} with 76~80% Efficiency
- -40°C to +85°C Operation (Derate 7.2%/K >75°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



1 Watt

TMR 1SM

- 0.74 × 0.54 × 0.33" - SMD Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT} with 78~82% Efficiency
- -40°C to +95°C Operation (Derate 5%/K >85°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



1 Watt

TMV

- 0.77 × 0.40 × 0.24" - SIP-7 Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 71~81% Efficiency
- -40°C to +90°C Operation (see spec for derating)
- 3,000 VDC I/O Isolation
- Unregulated



1 Watt

TMV-EN

- 0.87 × 0.49 × 0.30" - SIP-7 Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 66~75% Efficiency
- -25°C to +85°C (Derate 2.85 %/K above 70°C)
- 3,000 VAC RMS I/O Isolation
- Unregulated



1 Watt

TMV-HI

- 0.77 × 0.30 × 0.40" - SIP-7 Package
- ±10% Input (5 / 12 / 15 / 24 VDC)
- Single / Dual 3.3~15V_{OUT} with 70~80% Efficiency
- -40°C to +95°C Operation (Derate 6.7%/K >+85°C)
- 5,200 VDC I/O Isolation
- Dedicated for IGBT applications
- Unregulated



1 Watt

TRN 1

- 0.47 × 0.32 × 0.43" - SIP-5 Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 77~83% Efficiency
- -40°C to +90°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Fully Regulated



1 Watt

TRN 1SM

- 0.47 × 0.31 × 0.45" - SMD Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 77~83% Efficiency
- -40°C to +90°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Fully Regulated



1 Watt

TRV 1M

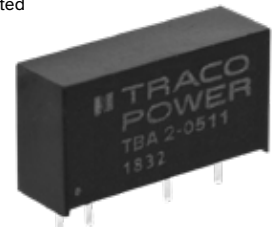
- 0.77 × 0.39 × 0.49" - SIP-7 Package
- ±10% Input (5 / 12 / 24 VDC)
- Single & Dual 5~15V_{OUT} with 84~88% Efficiency
- 5,000 VAC I/O Isolation (reinforced)
- Semi Regulated



1 Watt

TBA 2

- 0.46 × 0.38 × 0.24" - SIP-7 Package
- Next Gen cost optimized design
- ±10% Input (3.3 / 5 / 12 / 24 VDC)
- Single 3.3~15V_{OUT} with 73~84% Efficiency
- -40°C to +85°C Operation (Full Load)
- 1,500 VDC I/O Isolation
- Short Circuit Protection
- Unregulated



2 Watt

TDL 2

- 0.55 × 0.55 × 0.31" - DIP-8 Package
- 2:1 Input (4.5~10 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 79~87% Efficiency
- -40°C to +80°C Operation (Derate 4.0%/K >70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated



2 Watt

TDR 2

- 0.74 × 0.50 × 0.35" - DIP-14 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT} with 80~84% Efficiency
- -40°C to +85°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt

TDR 2SM

- 0.74 × 0.50 × 0.35" - SMD Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT} with 80~84% Efficiency
- -40°C to +85°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt TDR 2WI

- 0.74 × 0.50 × 0.35" - DIP-14 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 5~15V_{OUT} with 79~82% Efficiency
- -40°C to +85°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt TDR 2WISM

- 0.74 × 0.50 × 0.35" - SMD Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 5~15V_{OUT} with 79~82% Efficiency
- -40°C to +85°C Operation (Full Load)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt TEC 2

- 0.86 × 0.36 × 0.44" - SIP-8 Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 76~85% Efficiency
- -40°C to +95°C Operation (Derate 5.9 %/K>88°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt TEC 2WI

- 0.86 × 0.36 × 0.44" - SIP-8 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~82% Efficiency
- -40°C to +93°C Operation (Derate 4.8 %/K > 84°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt TEL 2

- 0.94 × 0.54 × 0.30" - DIP-16 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 70~80% Efficiency
- -40°C to +85°C Operation (Derate 4 %/K>75°C)
- 1,500 VDC I/O Isolation
- Fully Regulated



2 Watt TES 2H

- Singles: 0.54 × 0.37 × 0.35" - SMD Package
- Duals: 0.64 × 0.37 × 0.35" - SMD Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 3.3~15V_{OUT} with 70~80% Efficiency
- -40°C to +85°C Operation (Derate 4%/K>+75°C)
- 1,500 VDC I/O Isolation
- Unregulated



2 Watt TES 2M

- 0.94 × 0.54 × 0.35" - SMD Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 66~75% Efficiency
- -25°C to +80°C Operation (Derate 2.5%/K>+60°C)
- 4,000 VAC I/O Isolation(reinforced)
- IEC/EN/ES 60601-1 2×MOOP Qualified
- Unregulated



2 Watt THI 2M

- 0.94 × 0.54 × 0.34" - DIP-16 Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 66~75% Efficiency
- -40°C to +71°C Operation (Derate 2.5%/K>+60°C)
- 3,000 VAC I/O Isolation (300 Vrms working voltage)
- Fully Regulated



2 Watt TIM 2

- 0.95 × 0.57 × 0.40" - DIP-16 Package
- 2:1 Input (4.5~12 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24 V_{OUT} with 75~82% Efficiency
- -40°C to +95°C Operation (Derate 6.67%/K>90°C)
- 5,000 VAC Reinforced I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt TIM 2SM

- 0.95 × 0.57 × 0.40" - SMD Package
- 2:1 Input (4.5~12 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24 V_{OUT} with 75~82% Efficiency
- -40°C to +95°C Operation (Derate 6.67 %/K>90°C)
- 5,000 VAC Reinforced I/O Isolation
- Remote On/Off
- Fully Regulated



2 Watt TMH

- 0.77 × 0.40 × 0.30" - SIP-7 Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 76~83% Efficiency
- -40°C to +85°C Operation (Derate 3%/K>+70°C)
- 1,000 VDC I/O Isolation
- Unregulated



2 Watt TMR 2

- 0.86 × 0.36 × 0.44" - SIP-8 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 76~83% Efficiency
- -40°C to +92°C Operation (Derate 6.67 %/K>85°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

2 Watt**TMR 2WI**

- 1.02 × 0.36 × 0.49" - SIP-9 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 70~80% Efficiency
- -40°C to +85°C Operation (Derate 2.9%/K>+65°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**2 Watt****TMR 2WISM**

- 0.75 × 0.59 × 0.35" - SMD Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 70~80% Efficiency
- -40°C to +85°C Operation (Derate 2.9%/K>+65°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**2 Watt****TMR 2WIN**

- 0.86 × 0.44 × 0.37" - SIP-8 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 74~82% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>+75°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Economy Series
- Fully Regulated

**2 Watt****TMV 2HI**

- 0.77 × 0.30 × 0.40" - SIP-7 Package
- ±10% Input (5 | 12 | 15 | 24 VDC)
- Single 3.3~15V_{OUT} with 74~85% Efficiency
- -40°C to +85°C Operation (Derate 6.7%/K>+80°C)
- 5,200 VDC I/O Isolation
- IGBT Applications
- Unregulated

**2 Watt****TRS 2**

- 0.47 × 0.31 × 0.44" - SMD Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 76~84% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>+75°C)
- 1,600 VDC I/O Isolation
- Fully Regulated

**3 Watt****TDL 3**

- 0.55 × 0.55 × 0.31" - DIP-8 Package
- 2:1 Input (4.5~10 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 79~87% Efficiency
- -40°C to +95°C Operation (Derate 4%/K>+70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated

**3 Watt****TDN 3WI**

- 0.52 × 0.36 × 0.40" - DIP-8 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 76~83% Efficiency
- -40°C to +85°C Operation (Derate 2.9%/K>+70°C)
- 1,600 VDC I/O Isolation
- Fully Regulated

**3 Watt****TDN 3WISM**

- 0.52 × 0.36 × 0.40" - SMD Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 76~83% Efficiency
- -40°C to +85°C Operation (Derate 2.9%/K>+70°C)
- 1,600 VDC I/O Isolation
- Fully Regulated

**3 Watt****TDR 3**

- 0.74 × 0.50 × 0.35" - DIP-14 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT} with 80~83% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**3 Watt****TDR 3SM**

- 0.74 × 0.50 × 0.35" - SMD Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT} with 80~83% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**3 Watt****TDR 3WI**

- 0.74 × 0.50 × 0.35" - DIP-14 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 5~15V_{OUT} with 80~83% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**3 Watt****TDR 3WISM**

- 0.74 × 0.50 × 0.35" - SMD Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 5~15V_{OUT} with 80~83% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



3 Watt**TEC 3**

- 0.86 × 0.36 × 0.44" - SIP-8 Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~86% Efficiency
- -40°C to +90°C Operation (Derate 3.4%/K>+75°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**3 Watt****TEC 3WI**

- 0.86 × 0.36 × 0.44" - SIP-8 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 76~83% Efficiency
- -40°C to +90°C Operation (Derate 3.4%/K>+75°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**3 Watt****TEL 3**

- 1.26 × 0.79 × 0.40" - DIP-24 Package
- 2:1 Input (4.5~9 | 9~18 | 10~30 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT} with 70~81% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated

**3 Watt****TEM 3N**

- 1.26 × 0.80 × 0.40" - DIP-24 Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 70~82% Efficiency
- -40°C to +85°C Operation (Derate 5%/K>+75°C)
- 1,500 VDC I/O Isolation
- Low Noise (30mVp-p typ)
- Fully Regulated

**3 Watt****TEN 3N**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~72 VDC)
- Single / Dual 3.3~24V_{OUT} with 77~84% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,500 VDC I/O Isolation (optional 3,000 VDC)
- Fully Regulated

**3 Watt****TEN 3WIN**

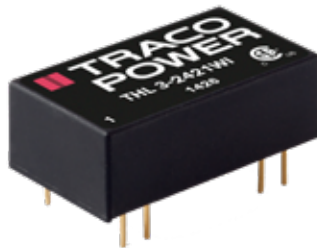
- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 77~84% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,500 VDC I/O Isolation (optional 3,000 VDC)
- Fully Regulated

**3 Watt****THI 3**

- 1.25 × 0.80 × 0.41" - DIP-24 Package
- ±10% Input (5 / 12 / 24 VDC)
- Single / Dual 5~15V_{OUT} with 60~64% Efficiency
- -40°C to +75°C Operation (Derate 2.78%/K>+60°C)
- Supplementary and reinforced insulation (2×MOOP)
- 4,000 VAC I/O Isolation
- Fully Regulated

**3 Watt****THL 3WI**

- 0.94 × 0.54 × 0.31" - DIP-16 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~80% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**3 Watt****THL 3WISM**

- 0.94 × 0.54 × 0.31" - SMD Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~80% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**3 Watt****THM 3**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~87.5% Efficiency
- -40°C to +100°C Operation (Derate 10 %/K>95°C)
- 5,000 VACrms I/O Isolation (reinforced)
- Fully Regulated

**3 Watt****THM 3WI**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (4.5~9 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~87.5% Efficiency
- -40°C to +100°C Operation (Derate 10 %/K>95°C)
- 5,000 VACrms I/O Isolation (reinforced)
- Fully Regulated

**3 Watt****THP 3**

- 1.25 × 0.80 × 0.41" - DIP-24 Package
- 4:1 Input (9~40 | 18~80 | 36~160 VDC)
- Single / Dual 5~15V_{OUT} with 78~83% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 3,000 VACrms I/O Isolation (reinforced)
- Fully Regulated



ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

3 Watt

THR 3WI

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 5~15V_{OUT} with up to 85% Efficiency
- -40 to +90°C Operation
- 3,000 VAC I/O Isolation (reinforced)
- Input filter to meet EN 55032, Class A
- Cost Optimized Design
- Fully Regulated



NEW - UNDER DEVELOPMENT

3 Watt

TMR 3

- 0.86 × 0.44 × 0.36" - SIP-8 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 75~85% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 3,000 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



3 Watt

TMR 3HI

- 0.86 × 0.44 × 0.36" - SIP-8 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 75~85% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 3,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



3 Watt

TMR 3WI

- 0.86 × 0.44 × 0.36" - SIP-8 Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 74~82% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



3 Watt

TMR 3WIR

- 0.86 × 0.44 × 0.38" - SIP-8 Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~83% Efficiency
- -40°C to +90°C Operation (Derate 4.55%/K>+78°C)
- 3,000 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



3 Watt

TMR 3WISM

- 0.86 × 0.44 × 0.36" - SMD Package
- 4:1 Input (4.5~18 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 80~85% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



3 Watt

TRI 3

- 1.25 × 0.80 × 0.41" - DIP-24 Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT}
- 7,071 VDC I/O Isolation (1,000V_{RMS} Working Voltage)
- EN 55032 Class A Filter
- Fully Regulated



3 Watt

TRN 3

- 0.47 × 0.32 × 0.43" - SIP-5 Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~48V_{OUT} with 75~84% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+65°C)
- 1,600 VDC I/O Isolation
- Fully Regulated

NEW!



3 Watt

TRN 3SM

- 0.47 × 0.30 × 0.44" - SMD Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~84% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+65°C)
- 1,600 VDC I/O Isolation
- Fully Regulated



3 Watt

TVN 3

- 0.86 × 0.44 × 0.38" - SIP-8 Package
- 2:1 Input (4.5~13.2 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 74~85% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>+75°C)
- Ultra-low noise / ripple (10mV)
- 1,600 VDC I/O Isolation
- Fully Regulated



3.5 Watt

TIM 3.5

- 0.95 × 0.57 × 0.40" - DIP-16 Package
- 2:1 Input (4.5~12 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24 V_{OUT} with 77~83% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>+75°C)
- 5,000 VACrms I/O Isolation (reinforced)
- Remote On/Off
- Fully Regulated



3.5 Watt

TIM 3.5SM

- 0.95 × 0.57 × 0.40" - SMD Package
- 2:1 Input (4.5~12 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24 V_{OUT} with 77~83% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>+75°C)
- 5,000 VACrms I/O Isolation (reinforced)
- Remote On/Off
- Fully Regulated



4 Watt**TMR 4**

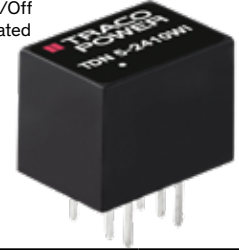
- 0.86 × 0.44 × 0.36" - SIP-8 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with up to 83% Efficiency
- -40°C to +85°C Operation
- 1,600 VDC I/O Isolation
- Short Circuit Protection
- Remote On/Off
- Fully Regulated

NEW - UNDER DEVELOPMENT**4 Watt****TMR 4WI**

- 0.86 × 0.44 × 0.36" - SIP-8 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with up to 83% Efficiency
- -40°C to +85°C Operation
- 1,600 VDC I/O Isolation
- Short Circuit Protection
- Remote On/Off
- Fully Regulated

NEW - UNDER DEVELOPMENT**5 Watt****TDN 5WI**

- 0.52 × 0.36 × 0.39" - DIP-8 Package
- 4:1 Input (4.5~13.2 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 76~84% Efficiency
- -40°C to +75°C Operation (Derate 1.8%/K > +50°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**5 Watt****TDN 5WISM**

- 0.52 × 0.36 × 0.39" - SMD Package
- 4:1 Input (4.5~13.2 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 76~84% Efficiency
- -40°C to +75°C Operation (Derate 1.8%/K > +50°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**5 Watt****TEL 5**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 VDC)
- Single / Dual 3.3~15V_{OUT} with 77~86% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K > +70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated

**5 Watt****TVN 5WI**

- 1.26 × 0.79 × 0.40" - DIP-24 Package
- 4:1 Input (4.5~12 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 79~89% Efficiency
- -40°C to +85°C Operation (Full Load)
- Ultra-Low Noise (10 mV)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**6 Watt****TEN 6N**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 75~84% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- 1,500 VDC I/O Isolation
- Economy Series
- Fully Regulated

**6 Watt****TEN 6WIN**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 77~84% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- 1,500 VDC I/O Isolation
- Economy Series
- Fully Regulated

**6 Watt****TEN 6WIN-HI**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 77~84% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- 3,000 VDC I/O Isolation
- Economy Series
- Fully Regulated

**6 Watt****THL 6WISM**

- 1.00 × 0.87 × 0.40" - SMD Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 76~83% Efficiency
- -40°C to +75°C Operation (Full Load)
- 1,500 VAC I/O Isolation (reinforced)
- Remote On/Off Control
- Fully Regulated

**6 Watt****THM 6**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 81.5~89% Efficiency
- -40°C to +95°C Operation (Derate 5.26%/K > 86°C)
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated

**6 Watt****THM 6WI**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input Ranges (4.5~9 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 82.5~89% Efficiency
- -40°C to +95°C Operation (Derate 5.26%/K > 86°C)
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated



ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

6 Watt TMR 6

- 0.86 × 0.44 × 0.36" - SIP-8 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 77~86% Efficiency
- -40°C to +78°C Operation (Derate 4%/K>+65°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



6 Watt TMR 6WI

- 0.86 × 0.44 × 0.36" - SIP-8 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~88% Efficiency
- -40°C to +84°C Operation (Derate 3.1%/K>+68°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



6 Watt TMR 6WIR

- 0.86 × 0.44 × 0.38" - SIP-8 Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~88% Efficiency
- -40°C to +80°C Operation (Derate 2.5%/K>+60°C)
- 3,000 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



6 Watt TRI 6

- 1.25 × 0.80 × 0.47" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~15V_{OUT}
- 7,071 VDC I/O Isolation (1,000V_{RMS} Working Voltage)
- Common mode transient Immunity (dv/dt)15kv/μs
- EN 55032 Class A Filter
- Fully Regulated



8 Watt TEL 8

- 0.95 × 0.55 × 0.33" - DIP-16 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 78~86% Efficiency
- -40°C to +80°C Operation (Derate 5%/K>+70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated



8 Watt TEL 8WI

- 0.95 × 0.55 × 0.33" - DIP-16 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 78~86% Efficiency
- -40°C to +80°C Operation (Derate 5%/K>+70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated



8 Watt TEN 8

- 1.26 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 80~87% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



8 Watt TEN 8WI

- 1.26 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~15V_{OUT} with 84~88% Efficiency
- -40°C to +85°C Operation (Derate 3%/K>+70°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



9 Watt TMR 9

- 0.86 × 0.44 × 0.38" - SIP-8 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~90% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+70°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



9 Watt TMR 9WI

- 0.86 × 0.44 × 0.38" - SIP-8 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 82~89% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+70°C)
- 1,600 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



10 Watt TEL 10

- 0.94 × 0.54 × 0.31" - DIP-16 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT}
- -40°C to +85°C Operation (see spec for derating)
- High power-density of 3.83W/cm³
- 1,500 VDC I/O Isolation
- Fully Regulated



10 Watt TEL 10WI

- 0.94 × 0.54 × 0.31" - DIP-16 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 80~87% Efficiency
- -40°C to +88°C Operation (see spec for derating)
- 1,500 VDC I/O Isolation
- Fully Regulated



10 Watt**THD 10N**

- 1.25 × 0.8 × 0.4" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 82~89% Efficiency
- -40°C to +85°C Operation (Derate 2.9%/K>+70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated

**10 Watt****THD 10WIN**

- 1.25 × 0.8 × 0.4" - DIP-24 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 85~87% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,500 VDC I/O Isolation
- Fully Regulated

**10 Watt****THL 10**

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 82~89% Efficiency
- -40°C to +80°C Operation (Derate 2.5%/K>+60°C)
- 1,500 VDC I/O Isolation
- Fully Regulated

**10 Watt****THL 10WI**

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 84~87% Efficiency
- -40°C to +75°C Operation (Derate 2.5%/K>+60°C)
- 1,500 VDC I/O Isolation
- Fully Regulated

**10 Watt****THM 10**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 80~89% Efficiency
- -40°C to +90°C Operation (Derate 3.33%/K>75°C)
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated

**10 Watt****THM 10WI**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input Ranges (4.5~9 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 80~89% Efficiency
- -40°C to +90°C Operation (Derate 3.33%/K>75°C)
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated

**10 Watt****THN 10WI**

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT}
- -40°C to +105°C Operation (Derate 4%/K>80°C)
- 3,000 VDC I/O Isolation
- Increased EMC Immunity
- Fully Regulated

**10 Watt****THR 10WI**

- 1.00 × 2.00 × 0.43" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT}
- -40°C to +90°C Operation
- 3,000 VAC I/O Isolation
- EN55032 Class A Filter
- Fully Regulated

**10 Watt****TRI 10**

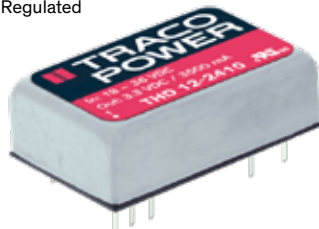
- 1.25 × 0.80 × 0.47" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT}
- 7,071 VDC I/O Isolation (1,000V_{RMS} Working Voltage)
- -40°C to +85°C Operation (see spec for derating)
- Fully Regulated

**12 Watt****TEL 12WI**

- 0.95 × 0.54 × 0.40" - DIP-16 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~15V_{OUT} with 82~88% Efficiency
- -40°C to +85°C Operation
- EN55032 Class A Filter
- High power-density of 361W/cm³
- Protection against short circuit and overload
- Fully Regulated

**12 Watt****THD 12**

- 1.25 × 0.8 × 0.40" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 2.5~15V_{OUT} with 82~88% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+65°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated

**12 Watt****THD 12WI**

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 82~85% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+65°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



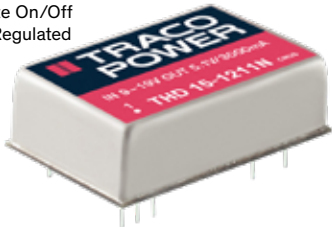
ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

15 Watt

THD 15N

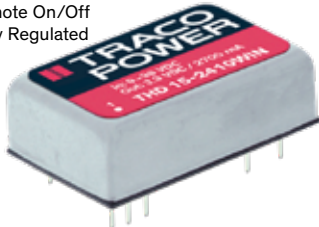
- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 87~91% Efficiency
- -40°C to +85°C Operation (Derate 4%/K>+70°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



15 Watt

THD 15WIN

- 1.25 × 0.80 × 0.40" - DIP-24 Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 88~90% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



15 Watt

THL 15WI

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT}
- -40°C to +80°C Operation (see spec for derating)
- 1,500 VDC I/O Isolation
- Remote On/Off and Trim Function
- Fully Regulated



NEW!

15 Watt

THM 15

- 1.60 × 1.00 × 0.40" - Through Hole PCB Mount
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~90% Efficiency
- -40°C to +85°C Convection (Derate 2.5%/K>+65°C)
- V_{Trim} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated



15 Watt

THM 15WI

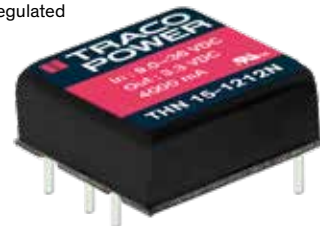
- 1.60 × 1.00 × 0.40" - Through Hole PCB Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~89% Efficiency
- -40°C to +85°C Convection (Derate 2.5%/K>+65°C)
- V_{Trim} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated



15 Watt

THN 15N

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 86~91% Efficiency
- -40°C to +105°C Convection (see spec for derating)
- Remote On/Off
- 1,600 VDC I/O Isolation
- Fully Regulated



15 Watt

THN 15WI

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} (85~91% Efficiency)
- -40°C to +85°C Operation (Derate 2.2%/K>+60°C)
- 1,600 VDC I/O Isolation
- Remote On/Off & V_{Trim} Functions
- Fully Regulated



NEW!

15 Watt

THN 15WIR

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 36~160 VDC)
- Single / Dual 3.3~24V_{OUT} with 86~91% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>+75°C)
- Remote On/Off & V_{Trim} Functions
- 3,000 VDC I/O Isolation
- Fully Regulated



15 Watt

TRI 15

- 2.00 × 1.00 × 0.47" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT}
- 5,940 VDC I/O Isolation (1,000V_{RMS} Working Voltage)
- -40°C to +85°C Operation (see spec for derating)
- Common mode Transient Immunity (dv/dt) 15kV/μs
- Fully Regulated



NEW!

20 Watt

TEN 20

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3~15V_{OUT} with 81~89% Efficiency
- -40°C to +85°C Operation (Derate 2.3%/K>+60°C)
- 1,500 VDC I/O Isolation
- Remote On/Off
- Fully Regulated



20 Watt

TEN 20WIN

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 85~89% Efficiency
- -40°C to +85°C Operation (see spec for derating)
- 1,500 VDC I/O Isolation
- Remote On/Off & V_{Trim} Functions
- Fully Regulated



20 Watt

TEN 20WIR

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~15V_{OUT} with 85~89% Efficiency
- -40°C to +85°C Operation (Derate 4.5%/K>+73°C)
- 2,250VDC I/O Isolation
- Remote On/Off & V_{Trim} Functions
- Fully Regulated



20 Watt **THL 20WI**

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 87~89% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- 1,500 VDC I/O Isolation
- Remote On/Off & V_{TRIM} Functions
- Fully Regulated



20 Watt **THM 20**

- 1.60 × 1.00 × 0.40" - Through Hole PCB Mount
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~90% Efficiency
- -40°C to +80°C Operation (Derate 2%/K>+55°C)
- V_{TRIM} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated



20 Watt **THM 20WI**

- 1.60 × 1.00 × 0.40" - Through Hole PCB Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~89.5% Efficiency
- -40°C to +80°C Operation (Derate 2%/K>+55°C)
- V_{TRIM} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated



20 Watt **THN 20**

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 86~90% Efficiency
- -40°C to +75°C Operation (Derate 2.0%/K>+60°C)
- Remote On/Off & V_{TRIM} Functions
- Internal EN 55032 class A Filter
- 1,500VDC I/O Isolation
- Fully Regulated



20 Watt **THN 20WI**

- 1.00 × 1.00 × 0.39 Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 86~91% Efficiency
- -40°C to +75°C Operation (Derate 2.0%/K>+60°C)
- Remote On/Off & V_{TRIM} Functions
- Internal EN 55032 class A Filter
- 1,500 VDC I/O Isolation
- Fully Regulated



20 Watt **THN 20WIR**

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with up to 91% Efficiency
- -40°C to +90°C Operation
- 3,000 VDC I/O Isolation
- V_{TRIM} Function & Remote On/Off
- Fully Regulated

NEW - UNDER DEVELOPMENT



20 Watt **THR 20WI**

- 2.00 × 1.00 × 0.43" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with up to 85% Efficiency
- -40°C to +88°C Operation
- 3,000 VAC I/O Isolation (reinforced)
- EN55032 Class A Filter
- Fully Regulated

NEW - UNDER DEVELOPMENT



20 Watt **TRI 20**

- 2.00 × 1.00 × 0.47" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 85~90% Efficiency
- 5,940 VDC I/O Isolation (1,000V_{RMS} Working Voltage)
- -40°C to +76°C Operation (see spec for derating)
- Fully Regulated

NEW!



25 Watt **THL 25**

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 87~90% Efficiency
- -40°C to +80°C Operation (Derate 2.0%/K>+55°C)
- Remote On/Off & V_{TRIM} Functions
- 1,500 VDC I/O Isolation
- Fully Regulated



25 Watt **THL 25WI**

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 87~90% Efficiency
- -40°C to +80°C Operation (Derate 2.0%/K>+55°C)
- 1,500 VDC I/O Isolation
- Remote On/Off & V_{TRIM} Functions
- Fully Regulated



30 Watt **TEN 30**

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 85~91% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+60°C)
- 1,500 VDC I/O Isolation
- Fully Regulated



30 Watt **TEN 30WIN**

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual / Triple 3.3~15V_{OUT}
- 86~91% Efficiency
- -40°C to +75°C Operation (Derate 3.5%/K>+60°C)
- Remote On/Off & V_{TRIM} Functions
- 1,500VDC I/O Isolation
- Fully Regulated

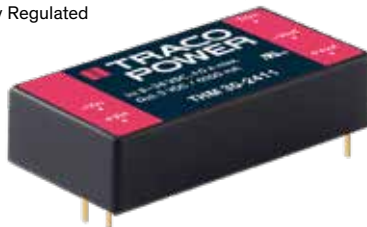


ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

30 Watt THM 30

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~91% Efficiency
- -40°C to +80°C Operation (see spec for derating)
- V_{Trim} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated



30 Watt THM 30WI

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 88~90% Efficiency
- -40°C to +80°C Operation (see spec for derating)
- V_{Trim} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)
- Fully Regulated



30 Watt THN 30

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 86~92% Efficiency
- -40°C to +80°C Operation (Derate 2.2%/K>+55°C)
- Remote On/Off & V_{Trim} Functions
- 1,500 VDC I/O Isolation
- Fully Regulated



30 Watt THN 30WI

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 36~160 VDC)
- Single / Dual 3.3~24V_{OUT} with up to 92% Efficiency
- -40°C to +80°C Operation (Derate 2.2%/K>+55°C)
- Remote On/Off & V_{Trim} Functions
- 1,500 VDC I/O Isolation
- Fully Regulated



30 Watt THN 30WIR

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 36~160 VDC)
- Single / Dual 3.3~24V_{OUT} with up to 92% Efficiency
- -40°C to +90°C Operation
- 3,000 VDC I/O Isolation
- Increased EMC Immunity
- Remote On/Off & V_{Trim} Functions
- Fully Regulated



NEW - UNDER DEVELOPMENT

40 Watt TEN 40

- 2.00 × 2.00 × 0.40" - PCB Through Hole Mount
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual / Triple 3.3~15V_{OUT}
- 84~90% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- Remote Sense & V_{Trim} Functions
- 1,500 VDC I/O Isolation
- Fully Regulated



40 Watt TEN 40E

- 2.00 × 1.00 × 0.40" - PCB Through Hole Mount
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT}
- 89~92% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off & V_{Trim} Functions
- 1,600 VDC I/O Isolation
- Fully Regulated



NEW!

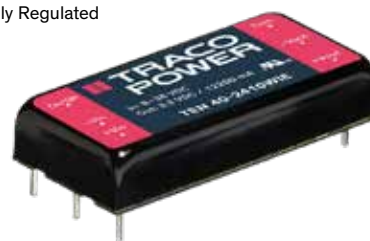
40 Watt TEN 40WI

- 2.00 × 2.00 × 0.40" - PCB Through Hole Mount
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~15V_{OUT} with 86~88% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote Sense, Remote On/Off & V_{Trim} Functions
- 1,500 VDC I/O Isolation
- Fully Regulated



40 Watt TEN 40WIE

- 2.00 × 1.00 × 0.40" - PCB Through Hole Mount
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 90~93% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off & V_{Trim} Functions
- 1,600 VDC I/O Isolation
- Fully Regulated



NEW!

40 Watt TEN 40WIR

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with 88~92% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+60°C)
- Remote On/Off & V_{Trim} Functions
- 1,600 VDC I/O Isolation
- Fully Regulated



40 Watt TEP 40UIR

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 12:1 Input (9~75 | 14~160 VDC)
- Single 5~48V_{OUT} with up to 92% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 3,000 VAC I/O Isolation
- Fully Regulated



NEW - UNDER DEVELOPMENT

40 Watt THR 40WI

- 2.00 × 1.00 × 0.43" - Standard 1×2" Package
- 4:1 Input (36~160 VDC)
- Single / Dual 5~24V_{OUT} with up to 89% Efficiency
- -40°C to +90°C Operation
- 3,000 VAC I/O Isolation (reinforced)
- Internal EN 55032 class A Filter
- Remote On/Off & V_{Trim} Functions
- Fully Regulated

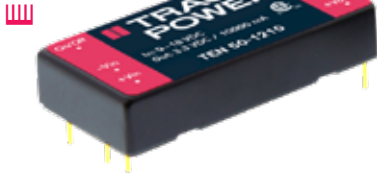


NEW - UNDER DEVELOPMENT



50 Watt TEN 50

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single 3.3~24V_{OUT} with 89~92% Efficiency
- -40°C to +85°C Operation (Derate 1.1%/K>+50°C)
- Remote On/Off & V_{Trim} Functions
- 1,500 VDC I/O Isolation
- Fully Regulated



50 Watt TEN 50WI

- 2.00 × 1.00 × 0.43" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single 3.3~24V_{OUT} with 90~92% Efficiency
- -40°C to +80°C Operation (Derate 2.0%/K>+55°C)
- Remote On/Off & V_{Trim} Functions
- 1,500 VDC I/O Isolation
- Fully Regulated



60 Watt TEN 60N

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with 90~92% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+50°C)
- Remote On/Off & V_{Trim} Functions
- 1,500VDC I/O Isolation
- Fully Regulated



60 Watt TEN 60WIN

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 91~92% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>+50°C)
- Remote On/Off & V_{Trim} Functions
- 1,500VDC I/O Isolation
- Fully Regulated



60 Watt TEN 60WIR

- 2.00 × 1.00 × 0.40" - 1×2" Package + heatsink
- 4:1 Input (9~36 | 18~75 | 36~160 VDC)
- Single / Dual 5~48V_{OUT} with up to 93% Efficiency
- -40°C to +90°C Operation
- Increased EMC Immunity
- Remote On/Off & V_{Trim} Functions
- Fully Regulated



NEW - UNDER DEVELOPMENT

60 Watt TEP 60UIR

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 12:1 Input (9~75 | 14~160VDC)
- Single 5~48V_{OUT} with up to 92% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 3,000 VAC I/O Isolation
- Fully Regulated



NEW - UNDER DEVELOPMENT

60 Watt THM 60WI

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 89~92% Efficiency
- -40°C to +80°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 5,000 VAC I/O Isolation (reinforced)
- Internal EN 55032 class A Filter
- <2.5µA Leakage



NEW - UNDER DEVELOPMENT

75 Watt TEP 75WI

- 2.40 × 2.28 × 0.50" - Half-Brick Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 87~91% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 2,250 VDC I/O Isolation
- Fully Regulated



100 Watt TEP 100

- 2.40 × 2.28 × 0.50" - Half-Brick Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single 3.3~48V_{OUT} with 90~93% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 2,250 VDC I/O Isolation
- Fully Regulated



100 Watt TEP 100UIR

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 4:1 Input (9~75 | 14~160 VDC)
- Single 5~48V_{OUT} with up to 89% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 3,000 VAC I/O Isolation
- Fully Regulated



NEW - UNDER DEVELOPMENT

100 Watt TEP 100WIR

- 2.40 × 2.28 × 0.50" - Half-Brick Package
- 4:1 Input (9~36 | 16.5~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 90~93% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 2,250 VDC I/O Isolation
- Fully Regulated



150-196 Watt TEP 160

- 2.40 × 2.28 × 0.50" - Half-Brick Package
- 2:1 Input (16.5~36 | 33~75 VDC)
- Single 12~48V_{OUT} with 92~93% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 2,250 VDC I/O Isolation
- Fully Regulated



ISOLATED PCB MOUNT & SMD CONVERTERS

1 - 240 Watts

142-182 Watt**TEP 160WIR**

- 2.40 × 2.28 × 0.50" - Half-Brick Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 90~91% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 2,250 VDC I/O Isolation
- Fully Regulated

**180-240 Watt****TEP 200WIR**

- 2.40 × 2.28 × 0.50" - Half-Brick Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~91% Efficiency
- -40°C to +75°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{Trim} Functions
- 2,250 VDC I/O Isolation
- Fully Regulated



MEDICAL DC/DC CONVERTERS

1 - 60 Watts

1 Watt

TRV 1M

- $0.77 \times 0.40 \times 0.24$ " - SIP-7 Package
- $\pm 10\%$ Input (5 | 12 | 24 VDC)
- Single 5~15V_{OUT} with 84~88% Efficiency
- 5,000 VAC I/O Isolation (reinforced)
- Semi Regulated

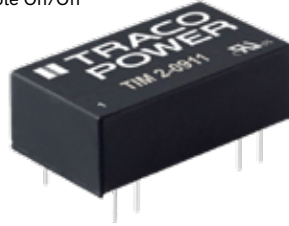


NEW!

2 Watt

TIM 2

- $0.95 \times 0.57 \times 0.40$ " - DIP 16 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24 V_{OUT} with 75~82% Efficiency
- -40°C to +95°C Operation (Derate 6.67%/K>90°C)
- 5,000 VAC I/O Isolation (reinforced)
- Remote On/Off



2 Watt

TIM 2SM

- $0.95 \times 0.57 \times 0.40$ " - SMD Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24 V_{OUT} with 75~82% Efficiency
- -40°C to +95°C Operation (Derate 6.67%/K>90°C)
- 5,000 VAC I/O Isolation (reinforced)
- Remote On/Off



3 Watt

THM 3

- $1.25 \times 0.80 \times 0.40$ " - 24-Pin DIP Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~87% Efficiency
- -40°C to +100°C Operation (Derate 10%/K>95°C)
- 5,000 VAC I/O Isolation (reinforced)



3 Watt

THM 3WI

- $1.25 \times 0.80 \times 0.40$ " - 24-Pin DIP Package
- 4:1 Input Ranges (4.5~9 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~87% Efficiency
- -40°C to +100°C Operation (Derate 10%/K>95°C)
- 5,000 VAC I/O Isolation (reinforced)



3.5 Watt

TIM 3.5

- $0.95 \times 0.57 \times 0.40$ " - DIP 16 Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24 V_{OUT} with 77~83% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>75°C)
- 5,000 VAC I/O Isolation (reinforced)
- Optional Remote On/Off



3.5 Watt

TIM 3.5SM

- $0.95 \times 0.57 \times 0.40$ " - SMD Package
- 2:1 Input (4.5~12 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24 V_{OUT} with 77~83% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>75°C)
- 5,000 VAC I/O Isolation (reinforced)
- Optional Remote On/Off



6 Watt

THM 6

- $1.25 \times 0.80 \times 0.40$ " - 24-Pin DIP Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 82~89% Efficiency
- -40°C to +95°C Operation (Derate 5.26%/K>86°C)
- 5,000 VAC I/O Isolation (reinforced)



6 Watt

THM 6WI

- $1.25 \times 0.80 \times 0.40$ " - 24-Pin DIP Package
- 4:1 Input Ranges (4.5~9 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 82~89% Efficiency
- -40°C to +95°C Operation (Derate 5.26%/K>86°C)
- 5,000 VAC I/O Isolation (reinforced)



10 Watt

THM 10

- $1.25 \times 0.80 \times 0.40$ " - 24-Pin DIP Package
- 2:1 Input (4.5~9 | 9~18 | 18~36 | 36~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 80~89% Efficiency
- -40°C to +90°C Operation (Derate 3.33%/K>75°C)
- 5,000 VAC I/O Isolation (reinforced)



10 Watt

THM 10WI

- $1.25 \times 0.80 \times 0.40$ " - 24-Pin DIP Package
- 4:1 Input (4.5~9 | 9~36 | 18~75 VDC)
- Single / Dual 3.3~24V_{OUT} with 80~89% Efficiency
- -40°C to +90°C Operation (Derate 3.33%/K>75°C)
- 5,000 VAC I/O Isolation (reinforced)



15 Watt

THM 15

- $1.60 \times 1.00 \times 0.40$ " - Through Hole PCB Mount
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~90% Efficiency
- -40°C to +85°C Operation (Derate 2.5%/K>65°C)
- V_{Trim} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)



MEDICAL DC/DC CONVERTERS

1 - 60 Watts

15 Watt

THM 15 WI

- 1.60 × 1.00 × 0.40" - Through Hole PCB Mount
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 87~89.5% Efficiency
- -40°C to +85°C Operation (Derate 2.86%/K>+65°C)
- V_{TRIM} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)



20 Watt

THM 20

- 1.60 × 1.00 × 0.40" - Through Hole PCB Mount
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~90% Efficiency
- -40°C to +80°C Operation (Derate 2.5%/K>+55°C)
- V_{TRIM} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)



20 Watt

THM 20WI

- 1.60 × 1.00 × 0.40" - Through Hole PCB Mount
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~90% Efficiency
- -40°C to +80°C Operation (Derate 2%/K>+55°C)
- V_{TRIM} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)



30 Watt

THM 30

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 2:1 Input (9~18 | 18~36 | 36~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~91% Efficiency
- -40°C to +80°C Operation (see spec for derating)
- V_{TRIM} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)



30 Watt

THM 30WI

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 86~91% Efficiency
- -40°C to +80°C Operation (see spec for derating)
- V_{TRIM} Function (Singles) and Optional Remote On/Off
- 5,000 VAC I/O Isolation (reinforced)



60 Watt

THM 60WI

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 4:1 Input (9~36 | 18~75 VDC)
- Single / Dual 5~24V_{OUT} with 89~92% Efficiency
- -40°C to +80°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 5,000 VAC I/O Isolation (reinforced)
- Internal EN 55032 class A Filter
- <2.5µA Leakage



NEW - UNDER DEVELOPMENT

CHASSIS-MOUNT DC/DC CONVERTERS

6 - 300 Watts

6 Watt **TMDC 06**

- 2.09 × 1.34 × 1.04" - Encapsulated Chassis Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single 5~48V_{OUT} with 81~85% Efficiency
- -40°C to +93°C Operation (Derate 4%/K>80°C)
- 3,000 VDC I/O Isolation
- Screw Terminal Connections
- DC OK LED & Remote On/Off

NEW!



6 Watt **TMDC 06H**

- 2.09 × 1.34 × 1.04" - Encapsulated Chassis Mount
- 2:1 Input Range (80~160 VDC)
- Single 5~48V_{OUT} with 79~84% Efficiency
- 3,000 VAC I/O Isolation (reinforced)
- -40°C to +93°C Operation (Derate 4%/K>80°C)
- Screw Terminal Connections
- DC OK LED & Remote On/Off

NEW!



10 Watt **TMDC 10**

- 3.10 × 1.34 × 0.87" - Encapsulated Chassis Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single 5~48V_{OUT} with 84~86% Efficiency
- -40°C to +93°C Operation (Derate 4%/K>80°C)
- 3,000 VDC I/O Isolation
- Screw Terminal Connections
- DC OK LED & Remote On/Off

NEW!



10 Watt **TMDC 10H**

- 3.10 × 1.34 × 0.87" - Encapsulated Chassis Mount
- 2:1 Input Ranges (80~160 VDC)
- Single 5~48V_{OUT} with 79~84% Efficiency
- 3,000 VAC I/O Isolation (reinforced)
- -40°C to +87°C Operation (Derate 2.86%/K>70°C)
- Screw Terminal Connections
- DC OK LED & Remote On/Off

NEW!



20 Watt **TEQ 20WIR**

- 4.06 × 2.25 × 1.03" - Enclosed
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~24V_{OUT} with 86~88% Efficiency
- -40°C to +93°C Ambient (see spec for derating)
- 2,250 VDC I/O Isolation



20 Watt **TMDC 20**

- 3.78 × 2.13 × 0.92" - Encapsulated Chassis Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single 5~48V_{OUT} with 89~91% Efficiency
- -40°C to +90°C Ambient (Derate 10%/K>85°C)
- Optional DIN Rail Mounting Kit
- EN55032 Class A Filter
- 2,500 VDC I/O Isolation
- Remote On/Off



20 Watt **TMDC 20H**

- 3.78 × 2.13 × 0.92" - Encapsulated Chassis Mount
- 2:1 Input Ranges (80~160 VDC)
- Single 5~48V_{OUT} with 87~88% Efficiency
- -40°C to +95°C Operation (Derate 4.76%/K>84°C)
- Optional DIN Rail Mounting Kit
- 3,000 VAC I/O Isolation (reinforced)
- EN55032 Class A Filter
- DC OK LED & Remote On/Off

NEW!



40 Watt **TEQ 40WIR**

- 4.06 × 2.25 × 1.03" - Enclosed + Heatsink
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~24V_{OUT} with 88~90% Efficiency
- -40°C to +92°C Ambient (Derate 5.9%/K>+83°C)
- 3,000 VDC I/O Isolation



40 Watt **TMDC 40**

- 4.41 × 2.51 × 1.01" - Encapsulated Chassis Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single 5~48V_{OUT} with 89~92% Efficiency
- -40°C to +85°C Ambient (Derate 4.5%/K>+73°C)
- Optional DIN Rail Mounting Kit
- 2,500 VDC I/O Isolation
- EN55032 Class A Filter
- Remote On/Off



40 Watt **TMDC 40H**

- 4.41 × 2.51 × 1.01" - Encapsulated Chassis Mount
- 2:1 Input Ranges (80~160 VDC)
- Single 5~48V_{OUT} with 87~89% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>75°C)
- Optional DIN Rail Mounting Kit
- 3,000 VAC I/O Isolation (reinforced)
- EN55032 Class A Filter
- DC OK LED & Remote On/Off

NEW!



60 Watt **TMDC 60**

- 4.41 × 2.67 × 1.5" - Encapsulated Chassis Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single 5~48V_{OUT} with 90~92% Efficiency
- -40°C to +85°C Ambient (Derate 3.3%/K>+70°C)
- Optional DIN Rail Mounting Kit
- 2,500 VDC I/O Isolation
- Remote On/Off



60 Watt **TMDC 60H**

- 4.41 × 2.67 × 1.5" - Encapsulated Chassis Mount
- 2:1 Input Ranges (80~160 VDC)
- Single 5~48V_{OUT} with 88~89% Efficiency
- -40°C to +90°C Operation (see spec for derating)
- Optional DIN Rail Mounting Kit
- 3,000 VAC I/O Isolation (reinforced)
- EN55032 Class A Filter
- Remote On/Off

NEW!



CHASSIS-MOUNT DC/DC CONVERTERS

6 - 300 Watts

75 Watt**TEP 75WICM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 87~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation

**100 Watt****TEP 100CM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 2:1 Input Ranges (9~18 | 18~36 | 36~75 VDC)
- Single 3.3~48V_{OUT} with 90~93% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation

**100 Watt****TEP 100WIRCM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 90~93% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation

**100 Watt****TEQ 100WIR**

- 4.06 × 3.50 × 3.45" - Sealed Metal Case
- 4:1 Input Ranges (10~36 | 19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with ~90% Efficiency
- -40°C to +105°C Ambient (Derate > +85°C)
- Optional DIN Rail Clip with UL508 Approvals
- Remote On/Off & Remote Sense
- 2,250 VDC I/O Isolation

**150 Watt****TEP 150WI(F)**

- 3.86 × 2.56 × 1.60" - Sealed Metal Case
- 4:1 Input Ranges (10~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 86~89% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Constant current output for battery load applications
- Remote On/Off & V_{TRIM} Function
- 2,250 VDC I/O Isolation
- Optional Class B EMI Filter (not shown)

**150-196 Watt****TEP 160CM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 2:1 Input Ranges (16.5~36 | 33~75 VDC)
- Single 12~48V_{OUT} with 92~93% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250VDC I/O Isolation

**142-182 Watt****TEP 160WIRCM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 90~91% Efficiency
- -40°C to +75°C Ambient (Derate 1.8%/K>+60°C)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation

**160 Watt****TEQ 160WIR**

- 4.06 × 3.50 × 3.45" - Sealed Metal Case
- 4:1 Input Ranges (10~36 | 19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with ~90% Efficiency
- -40°C to +75°C Ambient (derate > +78°C)
- Optional DIN Rail Clip with UL508 Approvals
- Remote On/Off & Remote Sense
- 2,250 VDC I/O Isolation

**180-240 Watt****TEP 200WIRCM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 90~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 2,250 VDC I/O Isolation
- Optional Class A Filter (as shown) & DIN Rail Clip

**200 Watt****TEQ 200WIR**

- 4.06 × 3.50 × 3.45" - Sealed Metal Case
- 4:1 Input Ranges (10~36 | 19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with ~90% Efficiency
- -40°C to +105°C Ambient (derate > +70°C)
- Optional DIN Rail Clip with UL508 Approvals
- Remote On/Off & Remote Sense
- 2,250 VDC I/O Isolation

**300 Watt****TEQ 300WIR**

- 6.00 × 4.00 × 1.52" - Sealed Metal Case
- 4:1 Input Ranges (18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~92% Efficiency
- -40°C to +80°C Ambient (Derate 2.2%/K>+60°C)
- Remote On/Off, Sense & Current Share Functions
- 3,000 VDC I/O Isolation
- UL508 Listed



**Chassis Mount Converters
with the  icon offer
DIN Rail Mount Clips**



RAILWAY / RUGGEDIZED CONVERTERS

3 - 300 Watts

INPUT FILTER

- RIA 12, NF F01-510 Surge Filter
- Clamps overvoltage transients (up to 385 VDC) at 168 VDC
- Wide input 43 to 160 VDC
- Brownout voltage 36 VDC min.
- 20 Watt = 1.25 × 0.8 × 0.40" - DIP-24 Package
- 150 & 300 Watt = 1.60 × 1.00 × .40" Package



TFI 20 / 150 / 300

NEW!

3 Watt

TMR 3WIR

- 0.86 × 0.44 × 0.37" - SIP-8 Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with 75~83% Efficiency
- -40°C to +90°C Ambient (Derate 4.55%/K>+78°C)
- 1,500 VDC (Optional 3,000 VDC) I/O Isolation
- Remote On/Off



6 Watt

TMR 6WIR

- 0.86 × 0.44 × 0.38" - SIP-8 Package
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with 81~87% Efficiency
- -40°C to +80°C Ambient (Derate 2.5%/K>+60°C)
- 1,500 VDC (Optional 3,000 VDC) I/O Isolation
- Remote On/Off



8 Watt

TEN 8WIR

- 1.25 × 0.8 × 0.4" - DIP-24 Package
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- SingleDual 3.3~15V_{OUT} with 81~89% Efficiency
- -40°C to +85°C Ambient (Derate 3%/K>+70°C)
- 1,500 VDC I/O Isolation
- Remote On/Off



10 Watt

THN 10WIR

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT}
- -40°C to +105°C Operation (Derate 4 %/K>80°C)
- 3,000 VDC I/O Isolation
- Increased EMC Immunity
- Fully Regulated



NEW!

15 Watt

THN 15WIR

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 4:1 Input Ranges (9~36 | 18~75 | 36~160 VDC)
- SingleDual 3.3~24V_{OUT} with 85~91% Efficiency
- -40°C to +90°C Ambient (Derate 3.3%/K>+75°C)
- Remote On/Off & V_{TRIM} Functions
- 3,000 VDC I/O Isolation



20 Watt

TEN 20WIR

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- SingleDual 3.3~15V_{OUT} with 85~89% Efficiency
- -40°C to +85°C Ambient (Derate 4.5%/K>+73°C)
- Remote On/Off, V_{TRIM} (±10 % min)
- 2,250VDC I/O Isolation



20 Watt

TEQ 20WIR

- 4.06 × 2.25 × 1.03" - Enclosed
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- 5~24V_{OUT} with 87~88% Efficiency
- -40°C to +93°C Operation (see spec for derating)
- 2,250VDC I/O Isolation



20 Watt

THN 20WIR

- 1.00 × 1.00 × 0.40" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with up to 91% Efficiency
- -40°C to +90°C Operation
- 3,000 VDC I/O Isolation
- V_{TRIM} Function & Remote On/Off
- Fully Regulated

NEW - UNDER DEVELOPMENT



30 Watt

THN 30WIR

- 1.00 × 1.00 × 0.39" - Standard 1×1" Package
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single / Dual 3.3~24V_{OUT} with up to 92% Efficiency
- -40°C to +90°C Operation
- 3,000 VDC I/O Isolation
- Increased EMC Immunity
- Remote On/Off & V_{TRIM} Functions
- Fully Regulated

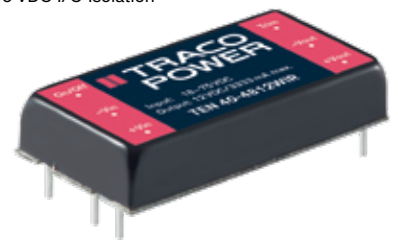
NEW - UNDER DEVELOPMENT



40 Watt

TEN 40WIR

- 2.00 × 1.00 × 0.40" - Standard 1×2" Package
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- SingleDual 3.3~24V_{OUT} with 89~92% Efficiency
- -40°C to +85°C Ambient (Derate 2.5%/K>+60°C)
- Remote On/Off, V_{TRIM} (±10 % min)
- 1,600 VDC I/O Isolation



RAILWAY / RUGGEDIZED CONVERTERS

3 - 300 Watts

40 Watt

TEQ 40WIR

- 4.06 × 2.25 × 1.03" - Enclosed
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- 5~24V_{OUT} with 88~91% Efficiency
- -40°C to +92°C Ambient (Derate 5.9%/K > +85°C)
- 3,000VDC for 43-160V_{IN}, others = 1,600VDC I/O Isolation



40 Watt

TEP 40UIR

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 12:1 Input (9~75 | 14~160VDC)
- Single 5~48V_{OUT} with up to 92% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 3,000 VAC I/O Isolation
- Fully Regulated



NEW - UNDER DEVELOPMENT

60 Watt

TEN 60WIR

- 2.00 × 1.00 × 0.40" - 1 × 2" Package + heatsink
- 4:1 Input (9~36 | 18~75 | 36~160 VDC)
- Single / Dual 5~48V_{OUT} with up to 91% Efficiency
- -40°C to +90°C Operation
- Increased EMC Immunity
- Remote On/Off & V_{TRIM} Functions
- Fully Regulated



NEW - UNDER DEVELOPMENT

60 Watt

TEP 60UIR

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 12:1 Input (9~75 | 14~160VDC)
- Single 5~48V_{OUT} with up to 92% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 3,000 VAC I/O Isolation
- Fully Regulated



NEW - UNDER DEVELOPMENT

75 Watt

TEP 75WI

- 2.40 × 2.28 × 0.50" - Half Brick
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 87~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 2,250 VDC I/O Isolation



75 Watt

TEP 75WICM(F)

- 3.35 × 2.40 × 1.53" - Baseplate
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 87~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation



100 Watt

TEP 100WIR

- 2.40 × 2.28 × 0.50" - Half Brick
- 4:1 Input (9~36 | 16.5~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 90~93% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 2,250 VDC I/O Isolation



100 Watt

TEP 100WIRCM(F)

- 3.35 × 2.40 × 1.53" - Baseplate
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 90~93% Efficiency
- -40°C to +85°C Ambient (Derate > +65°C)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation



100 Watt

TEP 100UIR

- 2.3 × 1.45 × 0.50" - Quarter Brick Package
- 4:1 Input (9~75 | 14~160VDC)
- Single 5~48V_{OUT} with up to 92% Efficiency
- -40°C to +85°C Operation (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 3,000 VAC I/O Isolation
- Fully Regulated



NEW - UNDER DEVELOPMENT

100 Watt**TEQ 100WIR**

- 4.06 × 3.50 × 3.45" - Sealed Metal Enclosure
- 4:1 Input Ranges (10~36 | 19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with ~90% Efficiency
- -40°C to +105°C Ambient (Derate 5%/K>+85°C)
- Remote On/Off & Remote Sense
- 2,250 VDC I/O Isolation
- Optional DIN Rail Clip
- UL508 Listed

**150 Watt****TEP 150WI(F)**

- 3.86 × 2.56 × 1.60" - Sealed Metal Enclosure
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 86~89% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Optional Class B Filter (not shown)
- 2,250 VDC I/O Isolation
- Remote On/Off

**142-182 Watt****TEP 160WIR**

- 2.40 × 2.28 × 0.50" - Half Brick
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 90~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 2,250 VDC I/O Isolation

**142-182 Watt****TEP 160WIRCM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 90~91% Efficiency
- -40°C to +75°C Ambient (Derate 1.8%/K>+60°C)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation

**160 Watt****TEQ 160WIR**

- 4.00 × 3.50 × 3.45" - Sealed Metal Enclosure
- 4:1 Input Ranges (19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~90% Efficiency
- -40°C to +105°C Ambient (Derate 3.7%/K>+78°C)
- Remote On/Off & Sense Functions
- UL508 Listed & Optional DIN Rail Clip (TEQ-MK1)
- 2,250 VDC I/O Isolation

**180-240 Watt****TEP 200WIR**

- 2.40 × 2.28 × 0.50" - Half Brick
- 4:1 Input (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- 2,250 VDC I/O Isolation
- Half Brick Package

**180-240 Watt****TEP 200WIRCM(F)**

- 3.35 × 2.40 × 1.53" - Baseplate
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~3.3V_{OUT} with 90~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & V_{TRIM} Functions
- Optional Class A Filter (shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation

**200 Watt****TEQ 200WIR**

- 4.06 × 3.45 × 3.50" - Sealed Metal Enclosure
- 4:1 Input Ranges (19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~90% Efficiency
- -40°C to +105°C Ambient (Derate 2.85%/K>+70°C)
- Remote On/Off & Sense Functions
- UL508 Listed & Optional DIN Rail Clip (TEQ-MK1)
- 2,250 VDC I/O Isolation

**300 Watt****TEQ 300WIR**

- 6.00 × 4.00 × 1.52" - Sealed Metal Enclosure
- 4:1 Input Ranges (18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~92% Efficiency
- -40°C to +80°C Ambient (Derate 2.2%/K>+60°C)
- Remote On/Off, Sense & Current Share Functions
- UL508 Listed & Optional DIN Rail Clip (TEQ-MK2)
- 3,000 VDC I/O Isolation



OPEN-FRAME & ENCLOSED

15 - 1,000 WATTS

15 Watt

TPP 15A-J

- 2.61 × 1.00 × 0.64" - Open-Frame
- Single Output (3.3 ~ 48 V_{OUT})
- -40 ~ 85°C Convection
- See spec for derating >+60°C
- 84-88.5% Efficiency
- <75µA Leakage Current



15 Watt

TPP 15A-D

- 1.5 × 1.00 × 0.80" - Open-Frame PCB Mount
- Single Output (3.3 ~ 48 V_{OUT})
- -40 ~ 85°C Convection
- See spec for derating >+60°C
- 84-88.5% Efficiency
- <75µA Leakage Current



15 / 25 Watt

TXM 015/025

- 3.11 × 2.00 × 1.13" - Enclosed
- Single Output (3.3 ~ 24 V_{OUT})
- -25°C to +70°C Convection
- Derate 2%/K>+50°C
- Cost Optimized Design
- 70-89% Efficiency



30 Watt

TPI 30A-J

- 3.34" x 1.36" x 0.88" - Open-Frame
- Single Output (3.3 ~ 48 V_{OUT})
- 83 ~ 90.5% Efficiency
- <75µA Leakage Current
- 3000 VDC reinforced I/O isolation

NEW - UNDER DEVELOPMENT



30 Watt

TPP 030A-D

- 2.74 × 1.36 × 0.95" - Open-Frame
- Single Output (3.3 ~ 48 V_{OUT})
- -40 to +85°C Convection
- See spec for derating > +60°C
- 84-91.5% Efficiency
- <75µA Leakage Current



30 Watt

TPP 30A-J

- 3.34 × 1.36 × 0.77" - Open-Frame
- Single Output (3.3 ~ 48 V_{OUT})
- -40°C to +85°C Convection
- See spec for derating >+60°C
- 84 ~ 91.5% Efficiency
- <75µA Leakage Current



35 Watt

TXM 035

- 4.00 × 2.50 × 1.30" - Enclosed
- Single Output (5 ~ 48 V_{OUT})
- -25°C to +70°C Convection
- Derate 2%/K>+50°C
- 80 ~ 88% Efficiency
- Cost Optimized



40 Watt

TPP 40

- Single: 3.53 × 2.38 × 1.31" - Enclosed
- Multi: 4.03 × 2.38 × 1.36" - Enclosed
- 5 ~ 24 V_{OUT} Outputs with 86 - 92% Efficiency
- -25°C to +85°C Convection
- Singles: Derate 2.75%/K>+65°C
- Multiples: Derate 1.67%/K>+55°C
- <75µA Leakage Current



40 Watt

TPP 40A-J

- 3.00 × 2.00 × 1.60" - Open-Frame
- Single Output (5 ~ 48 V_{OUT})
- -40°C to +85°C Convection
- See spec for derating >+65°C
- 90 ~ 92% Efficiency
- <75µA Leakage Current



50 Watt

TXM 050

- 3.90 × 3.23 × 1.38" - Enclosed
- Single Output (5 ~ 48 V_{OUT})
- -25°C to +70°C Convection
- Derate 2%/K>+50°C
- 80 ~ 89% Efficiency
- Cost Optimized Design



60 Watt

TXH 060

- 3.14 × 2.35 × 1.50" - Enclosed
- Single Output (5 ~ 48 V_{OUT})
- -30°C to +70°C Convection
- See Spec for derating
- 81 ~ 88% Efficiency



65 Watt

TPI 65A-J

- 3.00 × 2.00 × 0.94" - Open-Frame
- Single Output (5 ~ 48 V_{OUT})
- 3000 VDC reinforced I/O isolation
- 90 ~ 93% Efficiency

NEW - UNDER DEVELOPMENT



65 Watt**TPP 65**

- 3.53 × 2.38 × 1.31" - Enclosed
- Single Output (5 ~ 24 V_{OUT})
- -40 to +85°C Convection
- Derate 2%/K > +55°C
- 88.5 ~ 93.5% Efficiency
- <75µA Leakage Current

**65 Watt****TPP 65A-J**

- 3.00 × 2.00 × 0.94" - Open Frame
- Single Output (5 ~ 48 V_{OUT})
- -40°C to +85°C Convection
- Derate 2.5%/K > +55°C
- 90 ~ 93% Efficiency

**75 Watt****TXM 075**

- 5.08 × 3.90 × 1.50" - Enclosed
- Single (5 ~ 48 V_{OUT})
- -25°C to +70°C Convection (Derate 1.5%/K > +50°C)
- 80 ~ 89% Efficiency
- Cost Optimized Design

**100 Watt****TOP 100**

- 4.00 × 2.00 × 1.25" - Open-Frame
- Single Output (5 ~ 48 V_{OUT})
- -25 ~ +70°C Convection
- Full load to +50°C
- 90-92% Efficiency

**100 Watt****TPI 100A-J**

- 3.00 × 2.00 × 1.16" - Open-Frame
- Single Output (12 ~ 48 V_{OUT})
- -40°C to +80°C Convection (see derating)
- 91 ~ 92% Efficiency

**100 Watt****TPP 100**

- 3.60 × 2.44 × 1.54" - Enclosed
- Single Output (12 ~ 48 V_{OUT})
- -25°C to +85°C Convection
- Derate 2.4%/K > +60°C
- 91 ~ 92% Efficiency
- <75µA Leakage Current

**100 Watt****TPP 100A-J**

- 3.00 × 2.00 × 1.16" - Open-Frame
- Single Output (12 ~ 48 V_{OUT})
- -25°C to +85°C Convection
- Derate 2%/K > +55°C
- 91 ~ 92% Efficiency
- <75µA Leakage Current

**100 Watt****TXM 100**

- 5.08 × 4.18 × 1.50" - Enclosed
- Single Output (5 ~ 48 V_{OUT})
- -20°C to +60°C Convection (Derate 2.5%/K > +50°C)
- 84 ~ 88% Efficiency
- Cost Optimized Design

**120 Watt****TXH 120**

- 6.35 × 3.23 × 1.50" - Enclosed
- Single Output (12 ~ 48 V_{OUT})
- -25°C to +70°C Convection
- Derate 3%/K > 50°C
- 90 ~ 93% Efficiency

**150 Watt****TPI 150**

- 4.00 × 2.00 × 1.16" - Open-Frame
- Single Output (12 ~ 48 V_{OUT}) with 91 ~ 92% Efficiency
- -25°C to +85°C (see spec for derating)
- 10cfm air required for full load
- <0.3 W no load power consumption

**150 Watt****TPP 150**

- 4.60 × 2.44 × 1.94" - Enclosed with Fan
- Single Output (12 ~ 48 V_{OUT})
- -25°C to +80°C (Integral Fan)
- Derate 4%/K > +70°C
- 91 ~ 92% Efficiency
- <100µA Leakage Current

**150 Watt****TPP 150A-J**

- 4.00 × 2.00 × 1.16" - Open-Frame
- Single Output (12 ~ 48 V_{OUT})
- -25°C to +85°C (10cfm air for full load)
- Derate 4%/K > +70°C
- 91 ~ 92% Efficiency
- <100µA Leakage Current



OPEN-FRAME & ENCLOSED

15 - 1,000 WATTS

150 Watt

TXM 150

- 6.30 × 3.87 × 1.50" - Enclosed
- Single Output (12~48 V_{OUT})
- -20°C to +70°C Convection
- Derate 1.67%/K > +40°C
- 86~88% Efficiency
- Cost Optimized Design



TXM 200

TXM 200

- 7.83 × 3.90 × 1.98" - Enclosed
- Single Output (12~48 V_{OUT})
- -20°C to +65°C Convection
- Derate 3.3%/K > +50°C
- 87~88.5% Efficiency
- Cost Optimized Design



450 Watt

TPP 450

- 5.83 × 3.15 × 1.60" - Enclosed with Fan
- Single 12~53V_{OUT} with 91~94% Efficiency
- -40°C to +80°C Operating (See Spec for Derating)
- 5V / 2A standby output with integrated smart fan
- Remote Sense, Remote On/Off, Power Good
- <100µA Leakage Current



600 Watt

TPP 600A

- 5.00 × 3.00 × 1.50" - Open Frame
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPP / BF Compliant
- DC OK, Remote On/Off, Isolated 5VSB
- 12V@500mA Smart Fan Control
- ECO compliant Standby Power < 0.5 W
- Touch Current <100 µA



180 Watt

TPP 180A

- 3.00 × 2.00 × 1.18" - Open-Frame
- Single Output (12~48 V_{OUT})
- <100µA Leakage Current
- 3000 VDC reinforced I/O isolation



NEW - UNDER DEVELOPMENT

240 Watt

TXH 240

- 5.91 × 4.17 × 1.38" - U-Frame (optional Cover)
- Single Output (12~48 V_{OUT})
- -10°C to +70°C Convection
- Derate 2.5%/K > +50°C
- 90~93% Efficiency
- Optional Cover



450 Watt

TPP 450A-M

- 5.00 × 3.00 × 1.58" - Open Frame
- Single Output 12~53V_{OUT} with 91~94% Efficiency
- -40°C to +85°C Operating (See Spec for Derating)
- 5V / 2A standby & 12V / 500mA smart fan outputs
- Remote Sense, Remote On/Off, Power Good
- <100µA Leakage Current



850 Watt

TPP 850

- 6.00 × 4.00" footprint - Open Frame with Fan Assembly
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPP / BF Compliant
- 12V@500mA smart fan
- DC OK, Remote On/Off, Isolated 5VSB
- Touch Current <100 µA

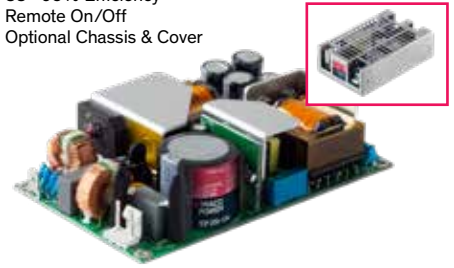


NEW - UNDER DEVELOPMENT

200 Watt

TOP 200

- 5.00 × 3.00 × 1.34" - Open-Frame
- Single Output (12~48 V_{OUT})
- -25°C to +70°C Convection (See Spec for Derating)
- 88~95% Efficiency
- Remote On/Off
- Optional Chassis & Cover



300 Watt

TPP 300A

- 4.00 × 2.00 × 1.22" - Open-Frame
- Single Output (12~48 V_{OUT})
- -40°C to +85°C Convection (See Spec for Derating)
- Remote On/Off & Remote Sense
- <100µA Leakage Current
- 3000 VDC reinforced I/O isolation



NEW - UNDER DEVELOPMENT

600 Watt

TPP 600

- 5.00 × 3.00" footprint - Open Frame with Fan Assembly
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPP / BF Compliant
- 12V@500mA smart fan
- DC OK, Remote On/Off, Isolated 5VSB
- Touch Current <100 µA



NEW - UNDER DEVELOPMENT

850 Watt

TPP 850A

- 6.00 × 4.00 × 1.50" - Open Frame
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPP / BF Compliant
- DC OK, Remote On/Off, Isolated 5VSB
- 12V@500mA Intelligent Fan Control
- ECO compliant Standby Power < 0.5 W
- Touch Current <100 µA



NEW - UNDER DEVELOPMENT

MEDICAL POWER SUPPLIES

5 - 850 WATTS

5 Watt

TMF 05

- 1.62 × 1.07 × 0.75" - Encapsulated PCB Mount
- Single 5~24 V_{OUT} with 77~82% Efficiency
- -25°C to +70°C Convection
- Derate 4%/K>+55°C
- <100µA Leakage Current



10 Watt

TMF 10

- 2.06 × 1.06 × 0.75" - Encapsulated PCB Mount
- Single 5~24 V_{OUT} with 79~84% Efficiency
- -25°C to +70°C Convection
- Derate 4%/K>+55°C
- <100µA Leakage Current



15 Watt

TPP 15A-D

- 1.5 × 1.00 × 0.80" - Open-Frame PCB Mount
- Single 3.3~48 V_{OUT} with 83~88.5% Efficiency
- -40 ~ 85°C Convection (Derate 2.5%/K>+60°C)
- <75µA Leakage Current



15 Watt

TPP 15A-J

- 2.61 × 1.00 × 0.64" - Open-Frame
- Single 3.3~48 V_{OUT} with 83~88.5% Efficiency
- -40°C to +85°C Convection (Derate 2%/K>+60°C)
- <75µA Leakage Current



15 Watt

TPP 15-D

- 1.65 × 1.14 × 0.82 - Encapsulated/PCB Mount
- Single 3.3~48 V_{OUT} with 84~88.5% Efficiency
- -40°C to +85°C Convection (Derate 3.7%/K>+70°C)
- <75µA Leakage Current



15 Watt

TPP 15-J

- 2.82 × 1.14 × 0.85" - Encapsulated / Chassis Mount
- Single 3.3~48 V_{OUT} with 84~88.5% Efficiency
- -40°C to +85°C Convection (Derate 3.7%/K>+70°C)
- <75µA Leakage Current



20 Watt

TMF 20

- 2.15 × 1.77 × 0.93" - Encapsulated PCB Mount
- Single 5~24 V_{OUT} with 78~84% Efficiency
- -25°C to +70°C Convection (Derate 3%/K>+50°C)
- <100µA Leakage Current



24 Watt

TMW 24

- Fits flushmount boxes for mounting to studs
- Single Output (5~24 V_{OUT})
- -20°C to +80°C Operation
- Safety approved for use in furniture
- IP68 rated enclosure
- <100µA Leakage Current



NEW - UNDER DEVELOPMENT

30 Watt

TMF 30

- 2.52 × 1.79 × 0.93" - Encapsulated PCB Mount
- Single Output (5~24 V_{OUT} with 82~88% Efficiency)
- -25°C to +70°C Convection (Derate 3%/K>+50°C)
- <100µA Leakage Current



30 Watt

TPP 30A-D

- 2.74 × 1.36 × 0.95" - Open-Frame PCB Mount
- Single 3.3~48 V_{OUT} with 84~91.5% Efficiency
- -40 ~ 85°C Convection (Derate 2.25%/K>+60°C)
- <100µA Leakage Current



30 Watt

TPP 30A-J

- 3.34 × 1.36 × 0.88" - Open Frame
- Single 3.3~48 V_{OUT} with 84~91.5% Efficiency
- -40°C to +85°C Convection (Derate 2.25%/K>+60°C)
- <100µA Leakage Current



30 Watt

TPP 30-D

- 2.89 × 1.50 × 1.00" - Encapsulated/PCB Mount
- Single 3.3~48 V_{OUT} with 84~91.5% Efficiency
- -40°C to +85°C Convection (derating 2.25%/K>+60°C)
- <100µA Leakage Current



MEDICAL POWER SUPPLIES

5 - 450 WATTS

30 Watt

TPP 30-J

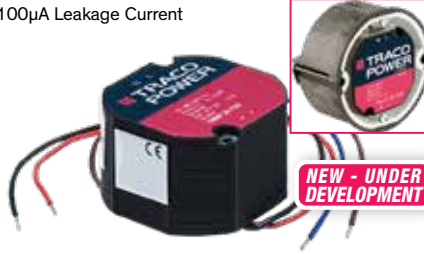
- 3.95 × 1.50 × 1.00" - Encapsulated/Chassis Mount
- Single 3.3~48 V_{OUT} with 84~91.5% Efficiency
- -40°C to +85°C Convection (Derate 2.25%/K>+60°C)
- <100µA Leakage Current



36 Watt

TMW 36

- Fits flushmount boxes for mounting to studs
- Single Output (5~24 V_{OUT})
- -20°C to +80°C Operation
- Safety approved for use in furniture
- IP68 rated enclosure
- <100µA Leakage Current



40 Watt

TPP 40

- 3.53 × 2.38 × 1.31" - Enclosed - Singles
- 4.03 × 2.38 × 1.36" - Enclosed - Multi
- Single/Dual/Triple Outputs (5~24 V_{OUT})
- Singles: -40°C to +85°C (Derate 2.75%/K>+65°C)
- Multi: -40°C to +85°C (Derate 1.67%/K>+55°C)
- <75µA Leakage Current
- 86~92% Efficiency



40 Watt

TPP 40A-J

- 3.00 × 2.00 × 1.00" - Open Frame
- Single Output (5~48 V_{OUT}) with 90~92% Efficiency
- -40°C to +85°C Convection
- Derate 2.75%/K>+65°C
- <75µA Leakage Current



65 Watt

TPP 65

- Single: 3.53 × 2.38 × 1.31" - Enclosed
- Multi: 4.03 × 2.38 × 1.36" - Enclosed
- Singles (5~24 V_{OUT}) / Multi Outputs (5~24 V_{OUT})
- -40°C to +85°C Convection
 - Singles Derate 2%/K>+55°C
 - Multi Derate 1.71%/K>+50°C
- <75µA Leakage Current
- 89~93.5% Efficiency



65 Watt

TPP 65A

- 3.00 × 2.00 × 1.00" - Open Frame
- Single 5~48 V_{OUT} with 90~93% Efficiency
- -40°C to +85°C Convection (Derate 2%/K>+55°C)
- <75µA Leakage Current



100 Watt

TPP 100

- 3.60 × 2.44 × 1.59" - Enclosed
- Single 12~48 V_{OUT} with 91~92% Efficiency
- -40°C to +80°C Convection (Derate 2.4%/K>+60°C)
- <75µA Leakage Current



100 Watt

TPP 100A-J

- 3.00 × 2.00 × 1.61" - Open Frame
- Single Output 12~48 V_{OUT} with 91~92% Efficiency
- -25°C to +85°C Convection (Derate 2%/K>+55°C)
- <75µA Leakage Current



150 Watt

TPP 150

- 4.60 × 2.44 × 1.94" - Enclosed with Fan
- Single 12~48 V_{OUT} with 91~92% Efficiency
- -25°C to +80°C Operating (Derate 4%/K>+70°C)
- <100µA Leakage Current



150 Watt

TPP 150A-J

- 4.00 × 2.00 × 1.16" - Open Frame
- Single 12~48 V_{OUT} with 91~92% Efficiency
- -20°C to +85°C Operating (10cfm for full load)
- see spec for derating
- <100µA Leakage Current



180 Watt

TPP 180A

- 3.00 × 2.00 × 1.18" - Open-Frame
- Single Output (12~48 V_{OUT})
- 90~92% Efficiency
- <100µA Leakage Current



300 Watt

TPP 300A

- 4.00 × 2.00 × 1.22" - Open-Frame
- Single 12~48 V_{OUT}
- Remote On/Off, 5VSB & 12VAUX
- -40°C to +85°C with derating
- 91~93% Efficiency
- <100µA Leakage Current



450 Watt

TPP 450

- 5.83 × 3.15 × 1.60" - Enclosed with Fan
- Single 12~53V_{OUT} with 91~94% Efficiency
- -40°C to +80°C Operating (See Spec for Derating)
- 5V / 2A standby output with integrated smart fan
- Remote Sense, Remote On/Off, Power Good
- <100µA Leakage Current



450 Watt

TPP 450A-M

- 5.00 × 3.00 × 1.58" - Open Frame
- Single Output 12~53V_{OUT} with 91~94% Efficiency
- -40°C to +85°C Operating (See Spec for Derating)
- 5V / 2A standby & 12V / 500mA smart fan outputs
- Remote Sense, Remote On/Off, Power Good
- <100µA Leakage Current



600 Watt

TPP 600

- 5.00 × 3.00" footprint - Open Frame with Fan Assembly
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPOP / BF Compliant
- 12V@500mA smart fan
- DC OK, Remote On/Off, Isolated 5VSB
- Touch Current <100 µA



600 Watt

TPP 600A

- 5.00 × 3.00 × 1.50" - Open Frame
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPOP / BF Compliant
- DC OK, Remote On/Off, Isolated 5VSB
- 12V@500mA Smart Fan Control
- ECO compliant Standby Power < 0.5 W
- Touch Current <100 µA



850 Watt

TPP 850

- 6.00 × 4.00" footprint - Open Frame with Fan Assembly
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPOP / BF Compliant
- 12V@500mA smart fan
- DC OK, Remote On/Off, Isolated 5VSB
- Touch Current <100 µA



850 Watt

TPP 850A

- 6.00 × 4.00 × 1.50" - Open Frame
- 24 / 28 / 36 / 48V_{OUT}, up to 94% efficiency
- -40°C to +70°C Operating Range
- 2 X MOPOP / BF Compliant
- DC OK, Remote On/Off, Isolated 5VSB
- 12V@500mA Intelligent Fan Control
- ECO compliant Standby Power < 0.5 W
- Touch Current <100 µA



ENCAPSULATED PCB MOUNT

2 - 60 WATTS

2 Watt TMSB 2

- 1.12 × 1.35 × 0.58" - Encapsulated PCB Mount
- Single & Dual 3.3~24 V_{OUT} with 69~76% Efficiency
- -30°C to +70°C / Derate 2%/K>+60°C
- Constant power, no current limit



3 Watt TMPS 03

- 1.00 × 1.00 × 0.64" - Encapsulated PCB Mount
- Single Output 3.3~24 V_{OUT} with 70~78% Efficiency
- -25°C to +70°C (Derate 5%/K>+60°C)



4 Watt TMLM 04

- 1.44 × 1.06 × 0.67" - Encapsulated PCB Mount
- Single & Dual 3.3~24 V_{OUT} with 67~74% Efficiency
- -25°C to +60°C Convection (Derate 3.75%/K>+50°C)



4 Watt TMPM 04

- 1.44 × 1.06 × 0.67" - Encapsulated PCB Mount
- Single & Dual 3.3~24 V_{OUT} with 70~77% Efficiency
- -25°C to +60°C Convection (No Derating)
- 47~440Hz Operation



5 Watt TMPS 05

- 1.00 × 1.00 × 0.64" - Encapsulated PCB Mount
- Single Output 3.3~48 V_{OUT} with 74~85% Efficiency
- -25°C to +70°C Convection (Derate 2.5%/K>+50°C)



5 Watt TMLM 05

- 2.00 × 1.00 × 0.59" - Encapsulated PCB Mount
- Single 3.3~24 V_{OUT} with 68~77% Efficiency
- -25°C to +60°C Convection (Derate 3.75%/K>+50°C)



5 Watt TMPW 5

- 1.45 × 1.08 × 0.07" - Encapsulated PCB Mount
- Single 3.3~24 V_{OUT} with up to 83% Efficiency
- -40°C to +70°C Operation
- Extended 90-305VAC input range
- 4000 VAC I/O Isolation
- Internal EN 55032 Class B Filter
- Optional chassis mount with JST connectors



NEW - UNDER DEVELOPMENT

7 Watt TMG 07

- 1.08 × 1.08 × 0.73" - Encapsulated PCB Mount
- Single 5~24 V_{OUT} with 77~80% Efficiency
- -25°C to +70°C Convection (See Spec for Derating)
- 4,242 VDC I/O Isolation



7 Watt TMP 07

- 2.00 × 1.00 × 0.77" - Encapsulated PCB Mount
- Single Output 3.3~24 V_{OUT} with 70~78% Efficiency
- -25°C to +70°C Convection (See Spec for Derating)
- 47~440Hz Operation



10 Watt TMLM 10

- 2.06 × 1.07 × 0.93" - Encapsulated PCB Mount
- Single Output 3.3~24 V_{OUT} with 74~82% Efficiency
- -25°C to +60°C Convection (Derate 3.75%/K>+50°C)



10 Watt TMP 10

- 2.52 × 1.77 × 0.76" - Encapsulated PCB Mount
- Single & Dual 3.3~24 V_{OUT} with 70~76% Efficiency
- -25°C to +50°C Convection (no derating)
- 47~440Hz Operation



10 Watt TMPM 10

- 2.06 × 1.07 × 0.93" - Encapsulated PCB Mount
- Single 3.3~24 V_{OUT} with 70~76% Efficiency
- -25°C to +70°C Convection (See Spec for Derating)
- 47~440Hz Operation



10 Watt **TMP5 10**

- 1.50 × 1.00 × 0.62" - Encapsulated PCB Mount
- Single 3.3~24 V_{OUT} with 77~86% Efficiency
- -25°C to +70°C Convection (Derate 2.5%/K>+50°C)



10 Watt **TMPW 10**

- 1.45 × 1.08 × 0.80" - Encapsulated PCB Mount
- Extended 90-305VAC input with Single 3.3~24 V_{OUT}
- -40°C to +70°C Operation
- 4000 VAC I/O Isolation
- Internal EN 55032 Class B Filter
- Optional chassis mount with JST connectors



15 Watt **TMG 15**

- 1.62 × 1.07 × 0.75" - Encapsulated PCB Mount
- Single Output 5~24 V_{OUT} with 80~85% Efficiency
- -40°C to +70°C Convection (See Spec for Derating)
- 4,242VDC I/O Isolation



15 Watt **TMP 15**

- 2.91 × 2.13 × 0.77" - Encapsulated PCB Mount
- Single / Dual / Triple Outputs (5~48 V_{OUT})
- -25°C to +70°C Convection (See Spec for Derating)
- 72~79% Efficiency
- 47~440Hz Operation



15 Watt **TMPS 15**

- 2.06 × 1.07 × 0.93" - Encapsulated PCB Mount
- Single 3.3~48 V_{OUT}
- Extended 90-305VAC input range



15 Watt **TPP 15D**

- 1.65 × 1.14 × 0.85" - Encapsulated PCB Mount
- Single 3.3~48 V_{OUT} with 84~88.5% Efficiency
- -40°C to +85°C Convection (Derate 3.7%/K>+70°C)
- EN 50178, EN 60335-1 Safety Approvals



20 Watt **TML 20**

- 2.76 × 1.87 × 0.85" - Encapsulated PCB Mount
- Single / Dual / Triple Outputs (3.3~24 V_{OUT})
- -25°C to +70°C Convection (Derate 3.75%/K>+50°C)
- 75~84% Efficiency



20 Watt **TMLM 20**

- 2.06 × 1.07 × 0.93" - Encapsulated PCB Mount
- Single 3.3~24 V_{OUT} with 74~83% Efficiency
- -25°C to +60°C Convection (Derate 2.5%/K>+40°C)



24 Watt **TMM 24**

- 2.91 × 2.13 × 0.77" - Encapsulated PCB Mount
- Single / Dual 5~24 V_{OUT} with 77~85% Efficiency
- -40°C to +80°C Convection (Derate 5%/K>+65°C)



25 Watt **TMPW 25**

- 2.07 × 1.08 × 0.90" - Encapsulated PCB Mount
- Single 5~24 V_{OUT} with up to 88% Efficiency
- -40°C to +70°C Operation
- Extended 90-305VAC input with 4000 VAC I/O Isolation
- Internal EN 55032 Class B Filter
- Optional chassis mount with JST connectors



30 Watt **TMG 30**

- 2.52 × 1.77 × 0.93" - Encapsulated PCB Mount
- Single 3.3~24 V_{OUT} with 80~86% Efficiency
- -40°C to +70°C Convection (See Spec for Derating)
- 4,242 VDC I/O Isolation



30 Watt **TMP 30**

- 3.50 × 2.50 × 0.85" - Encapsulated PCB Mount
- Single & Dual 5~48 V_{OUT} with 78~80% Efficiency
- -25°C to +70°C Convection (See Spec for Derating)
- 47~440Hz Operation



ENCAPSULATED PCB MOUNT

2 - 60 WATTS

30 Watt TPP 30D

- 2.89 × 1.50 × 1.00" - Encapsulated PCB Mount
- Single 3.3~48 V_{OUT} with 84~91.5% Efficiency
- -40°C to +85°C Convection (derating >60°C)



40 Watt TML 40

- 3.52 × 2.52 × 0.98" - Encapsulated PCB Mount
- Single / Dual / Triple Outputs (3.3~24 V_{OUT})
- -40°C to +60°C Convection (Derate 3%/K>+60°C)
- 75~84% Efficiency
- 47~440Hz Operation



40 Watt TMM 40

- 3.50 × 2.50 × 1.18" - Encapsulated PCB Mount
- Single / Dual 5~24 V_{OUT} with 81~85% Efficiency
- -40°C to +80°C Convection (Derate 3.75%/K>+60°C)



50 Watt TMG 50

- 2.92 × 2.13 × 0.86" - Encapsulated PCB Mount
- Single Output 5~48 V_{OUT} with 86~90% Efficiency
- -40°C to +70°C Convection (See Spec for Derating)
- 4,242 VDC I/O-I/O Isolation



50 Watt TMPW 50

- 2.92 × 1.85 × 0.90" - Encapsulated PCB Mount
- Single 12~24 V_{OUT} with up to 89% Efficiency
- -40°C to +70°C Operation
- Extended 90-305VAC input with 4000 VAC I/O Isolation
- Internal EN 55032 Class B Filter
- Optional chassis mount with JST connectors



60 Watt TMM 60

- 3.50 × 2.66 × 1.35" - Encapsulated PCB Mount
- Single & Dual 5~48 V_{OUT} with 84~88% Efficiency
- -40°C to +75°C Convection (Derate 3.75%/K>+60°C)



60 Watt TMP 60

- 3.50 × 2.66 × 1.35" - Encapsulated PCB Mount
- Single Output 5~48 V_{OUT} with 79~84% Efficiency
- -25°C to +70°C Convection (See Spec for Derating)



OUTDOOR POWER SUPPLIES (IP67 or IP68 RATED)

6 - 120 Watts

6 Watt TIW 06

- 1.98 × 1.98 × 0.93" - Wall / Flush Box Mount
- Single 3.3~6 V_{OUT} with 75~80% Efficiency
- -25°C to +50°C Convection (No Derating)
- EN 50178, EN 60335-1, UL 1310 class 2
- Fully encapsulated plastic housing & IP67 rated



12 Watt TIW 12

- 1.98 × 1.98 × 0.93" - Wall / Flush Box Mount
- Single 12~24 V_{OUT} with 80% Efficiency
- -25°C to +50°C Convection (No Derating)
- EN 50178, EN 60335-1, UL 1310 class 2
- Fully encapsulated plastic housing & IP67 rated



24 Watt TIW 24

- 2.20 × 2.20 × 1.26" - Wall / Flush Box
- Single 12~24 V_{OUT} with 83~85% Efficiency
- -25°C to +50°C Convection (No Derating)
- EN 50178, EN 60335-1, UL 1310 Class 2
- Fully encapsulated plastic housing & IP67 rated



ENCAPSULATED CHASSIS MOUNT

15 - 100 WATTS

15 Watt TMP 15C

- 3.78 × 2.13 × 0.92" - Chassis Mount + Terminal Strip
- Single 5~48 V_{OUT} with 75~79% Efficiency
- -25°C to +70°C Convection
- Derate 3.3%/K > +50°C to +65°C, then 5%/k
- UL508 Approval / Optional DIN Rail Mounting Clip
- 47~440 Hz Operation



15 Watt TPP 15-J

- 2.82 × 1.14 × 0.82" - Encapsulated Chassis Mount
- Single 3.3~48 V_{OUT} with 84~88.5% Efficiency
- -40°C to +85°C Convection
- Derate 3.7%/K above +70°C
- EN 50178, EN 60335-1 Safety Approvals



24 Watt TMM 24C

- 3.78 × 2.13 × 0.92" - Encapsulated Chassis Mount
- Single / Dual 5~24 V_{OUT} with 77~85% Efficiency
- -40°C to +80°C Convection (Derate 5%/K > +65°C)
- ITE, Medical and UL508 Approvals
- Optional DIN Rail Clip



30 Watt TMP 30C

- 4.41 × 2.51 × 1.01" - Encapsulated Chassis Mount
- Single/Dual/Triple 3.3~48 V_{OUT} with 78~80% Efficiency
- -25°C to +70°C Convection
- Derate 3.3%/K > +50°C to +65°C, then 5%/k
- UL508 Approval / Optional DIN Rail Mounting Clip
- 47~440 Hz Operation



40 Watt TPP 30-J

- 4.41 × 2.51 × 1.34" - Encapsulated Chassis Mount
- Single / Dual 5~24 V_{OUT} with 81~85% Efficiency
- -40°C to +80°C Convection
- Derate 3.75%/K > +60°C
- ITE, Medical and UL508 Approvals
- Optional DIN Rail Clip



40 Watt TMM 40C

- 4.41 × 2.51 × 1.34" - Encapsulated Chassis Mount
- Single / Dual 5~24 V_{OUT} with 81~85% Efficiency
- -40°C to +80°C Convection
- Derate 3.75%/K > +60°C
- ITE, Medical and UL508 Approvals
- Optional DIN Rail Clip



60 Watt TMM 60C

- 4.41 × 2.67 × 1.50" - Encapsulated Chassis Mount
- Single 5~48 V_{OUT} with 84~88% Efficiency
- -40°C to +75°C Convection
- Derate 3.75%/K > +60°C
- ITE, Medical and UL508 Approvals
- Optional DIN Rail Clip



60 Watt TMP 60C

- 4.41 × 2.67 × 1.50" - Encapsulated Chassis Mount
- Single 5~48 V_{OUT} with 79~84% Efficiency
- -25°C to +70°C Convection
- Derate 3.3%/K > +50°C to +65°C, then 5%/k
- UL508 Approval / Optional DIN Rail Mounting Clip



100 Watt TML 100C

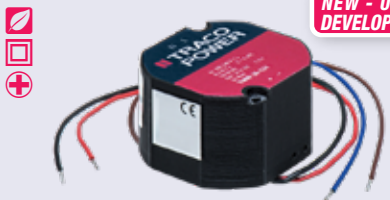
- 5.60 × 2.48 × 1.46" - Encapsulated Chassis Mount
- Single 12~48 V_{OUT} with 90~93% Efficiency
- -25°C to +70°C Convection
- Derate 3.75%/K > +50°C
- Remote On/Off Control



24 Watt TMW 24

- Fits flushmount boxes for mounting to studs
- Single Output (5~24 V_{OUT})
- -20°C to +80°C Operation
- Safety approved for use in furniture
- IP68 rated enclosure
- <100µA Leakage Current

NEW - UNDER DEVELOPMENT



36 Watt TMW 36

- Fits flushmount boxes for mounting to studs
- Single Output (5~24 V_{OUT})
- -20°C to +80°C Operation
- Safety approved for use in furniture
- IP68 rated enclosure
- <100µA Leakage Current

NEW - UNDER DEVELOPMENT



120 Watt TEX 120

- 6.85 × 3.66 × 2.20" - IP67 / NEMA 4X Aluminum Case
- Single Output (12 & 24 V_{OUT})
- -40°C to +85°C Operating (Derate 2%/K > +60°)
- Connection via waterproof I/O plug-connectors
- UL HazLoc / ATEX Certified for Class I, Zone 2



GENERAL AUTOMATION

6 - 150 Watts

6 Watt TBLC 06

- 2.34 × 0.71 × 3.52" - Plastic Enclosure
- 5 | 12 | 24V_{OUT} with 74~81% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +55°C)



15 Watt TBL 015

- 1.04 × 3.52 × 2.34" - Plastic Enclosure
- 5 | 12 | 24V_{OUT} with 73~81% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +60°C)
- 5~5.2 / 12~16 / 24~28VDC Adjustment Ranges



15 Watt TBLC 15

- 2.34 × 1.06 × 3.52" - Plastic Enclosure
- 5 | 12 | 24V_{OUT} with 81~85% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +55°C)



25 Watt TBLC 025

- 2.34 × 1.42 × 3.52" - Plastic Enclosure
- 5 | 12 | 24V_{OUT} with 82~87% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +55°C)



30 Watt TBL 030

- 2.07 × 3.52 × 2.34" - Plastic Enclosure
- 12~16 | 24~28V_{OUT} with 81~83% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +60°C)



30 Watt TPC 030

- 3.80 × 3.54 × 1.04" - Plastic Enclosure
- 5 | 12 | 24 | 48V_{OUT} with 79~84% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +50°C)



50 Watt TBLC 050

- 2.34 × 2.13 × 3.52" - Plastic Enclosure
- 12 | 24V_{OUT} with 88~89% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +55°C)



55 Watt TPC 055

- 3.80 × 3.54 × 1.77" - (96.5 × 89.9 × 44.9mm)
- 12 | 24 | 48V_{OUT} with up to 87% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +50°C)



60 Watt TBL 060

- 2.76 × 3.52 × 2.34" - Plastic Enclosure
- 12~16 | 24~28V_{OUT} with 83~85% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +60°C)



75 Watt TBLC 75

- 2.34 × 2.83 × 3.52" - Plastic Enclosure
- 12 | 24V_{OUT} with 89% Efficiency
- -25°C to 70°C Operation (Derate 2.5%/K> +55°C)



80 Watt TPC 080

- 3.80 × 3.54 × 2.48" - Plastic Enclosure
- 12 | 24 | 48V_{OUT} with up to 87% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +50°C)



90 Watt TBL 090

- 4.13 × 3.52 × 2.34" - Plastic Enclosure
- 12~16 | 24~28V_{OUT} with 84~86% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K> +60°C)



90 Watt

TBLC 90

- 2.34 × 3.54 × 3.52" - Plastic Enclosure
- 12 | 24V_{OUT} with 90% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K > +55°C)



120 Watt

TPC 120

- 4.33 × 3.54 × 2.83" - Plastic Enclosure
- 12 | 24 | 48V_{OUT} with up to 87% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K > +50°C)



150 Watt

TBL 150

- 6.89 × 3.52 × 2.34" - Plastic Enclosure
- 12 ~ 16 / 24 ~ 28 V_{OUT} with 84 ~ 87% Efficiency
- -25°C to +70°C Operation (Derate 2.5%/K > +60°C)



Encapsulated Chassis Mount Power Supplies with Optional DIN Rail Clips

Providing 3.3~48 VDC Outputs

(see page 34 for product details)

TMM-C Models

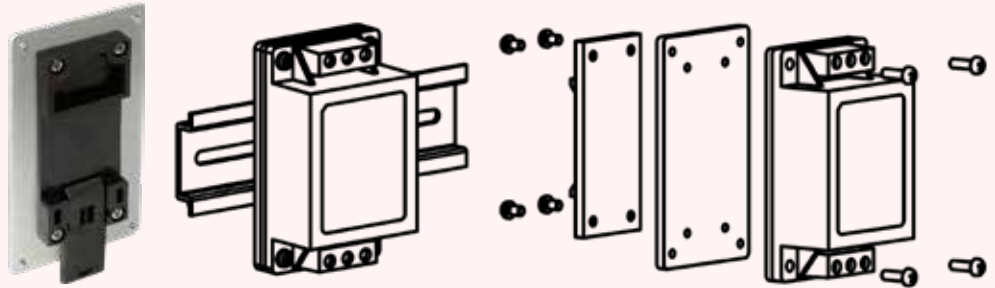
-40°C to +75~80°C + Medical I/O Isolation

- TMM24C 3.78 × 2.13 × 0.92"
- TMM40C 4.41 × 2.51 × 1.34"
- TMM60C 4.41 × 2.67 × 1.50"

TMP-C Models

-25°C to +70°C Convection

- TMP15C 3.78 × 2.13 × 0.92"
- TMP30C 4.41 × 2.51 × 1.01"
- TMP60C 4.41 × 2.67 × 1.50"



DIN RAIL POWER

STATUS & CONTROL MODULES

Solutions to further upgrade TRACO POWER's line of DIN Rail power supplies. We offer function modules for battery management / Charging, Buffering, Powersharing and Redundancy.

TSPC 240UPS - 240 Watt + UPS System

- 4.72 × 4.49 × 3.94" - (120 × 114 × 100mm)
- Selectable 85 ~ 132 / 187 ~ 264 VAC Input Ranges
- 24V_{OUT} (88 ~ 92% Efficiency)
- -25°C to +70°C Convection (Derate 2.5%/K > +60°C)
- Input / Output / Battery Alarm Outputs



TSPC-BCMU360 - Battery Management Module

- 4.45 × 1.33 × 2.13" - (113 × 110 × 54mm)
- 2 × 360 W for identical 24 VDC or 48 VDC sources
- Redundant Input Sources / Max 360W Output
- Input / Output / Battery Alarm Outputs
- Charge / Monitor 12V Lead Acid Battery(ies)



TSP-BCM - Battery Control Modules

- 12/24/48V | 180 ~ 600 Watt Modules
- Input / Output / Battery Alarm Outputs
- Remote On/Off of P/S & Battery



TSP-BFM - Dip/Brownout Protection

- Capacitor bank for energy storage
- Maintenance free, long life at low temperature.
- Hold-up-time 200ms/25A through 4s/1.2A max.
- Output 24 to 28 VDC, 600 W max.
- Active ready and inhibit signals



TSP-REM - Current Share / Alarms

- 360 ~ 600 Watt Modules (24 ~ 27VDC)
- Operation with true current sharing
- Alarm outputs and redundancy OK signal
- Hot swappable inputs



RUGGED INDUSTRIAL

70 - 600 Watts

70-90 Watt TSP 070/090

- 4.33 × 4.33 × 1.38" - Rugged Metal Enclosure
- 12 & 24 & 48V_{OUT} with 87% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good
- +18% V_{OUT} Adjust Range



80 Watt TIB 080

- 3.88 × 1.26 × 4.50" - Rugged Metal Enclosure
- 12 / 24 / 48V_{OUT} +15% Adjust with 88-90% Efficiency
- -40°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



120 Watt TIB 120

- 4.89 × 1.42 × 4.50" - Rugged Metal Enclosure
- 12 / 24 / 48V_{OUT} +15% Adjust with 88-90% Efficiency
- -40°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



140-180 Watt TSP 140/180

- 4.33 × 4.33 × 2.13" - Rugged Metal Enclosure
- 12 & 24 & 48V_{OUT} with 87% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good
- +18% V_{OUT} Adjust Range



180 Watt TSP 180WR

- 4.33 × 4.33 × 2.13" - Rugged Metal Enclosure
- 85-132 / 187-264 / 323-550 VAC Input
- 24V_{OUT} with Efficiency (adjustable up to 28VDC)
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good Signal



240 Watt TIB 240

- 4.89 × 1.89 × 4.50" - Rugged Metal Enclosure
- 24 / 48V_{OUT} +15% Adjust with 95% Efficiency
- -25°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



360 Watt TSP 360

- 4.92 × 4.92 × 3.15" - Rugged Metal Enclosure
- 24 & 48V_{OUT} with 87% Efficiency (+18% V_{ADJ} Range)
- -25°C to 70°C Convection (See Spec for Derating)
- EN60204 / EN60079 / Optional ATEX Compliance
- Remote On/Off & Power Good



360 Watt TSP 360-WR

- 4.92 × 4.92 × 3.15" - Rugged Metal Enclosure
- 85-132 / 187-264 / 323-550 VAC Input
- 24V_{OUT} (V_{ADJ} up to 28VDC) with 88% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good Signal



480 Watt TIB 480

- 4.89 × 3.23 × 4.50" - Rugged Metal Enclosure
- 24 / 48V_{OUT} +15% Adjust with 95% Efficiency
- -25°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



600 Watt TSP 600

- 4.92 × 4.92 × 6.50" - Rugged Metal Enclosure
- 24 & 36 & 48V_{OUT} with 87% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good
- +18% V_{ADJ} Range



600 Watt TSP 600-WR

- 4.92 × 4.92 × 7.48" - Rugged Metal Enclosure
- 85-132 / 187-264 / 323-550 VAC Input
- 24V_{OUT} (V_{ADJ} up to 28VDC) with 88% Efficiency
- -25°C to +70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good Signal



HARSH ENVIRONMENT

50 - 600 Watts

50 Watt TSPC 050

- 3.56 × 1.45 × 4.33" - Rugged Metal Enclosure
- 12 & 24V_{OUT} with 85~93% Efficiency
- -25°C to 70°C Convection (Derate 2.5%/K>+60°C)
- Power Boost up to 120% (5 seconds)
- Power Good Signal



80 Watt TSPC 080

- 4.33 × 1.57 × 4.33" - Rugged Metal Enclosure
- 12 & 24V_{OUT} with 85~93% Efficiency
- -25°C to 70°C Convection (Derate 2.5%/K>+60°C)
- Power Boost up to 120% (5 seconds)
- Power Good Signal



80 Watt TIB 080EX

- 3.88 × 1.26 × 4.50" - Rugged Metal Enclosure
- 12 / 24 / 48V_{OUT} +15% Adjust with 88-90% Efficiency
- -40°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



NEW!

70-90 Watt TSP 070/090-EX

- 4.33 × 4.33 × 1.38" - Rugged Metal Enclosure
- 12 & 24 & 48V_{OUT} with 87% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good
- +18% V_{OUT} Adjust Range



120 Watt TIB 120EX

- 4.89 × 1.42 × 4.50" - Rugged Metal Enclosure
- 12 / 24 / 48V_{OUT} +15% Adjust with 88-90% Efficiency
- -40°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



NEW!

120 Watt TSPC 120

- 4.33 × 1.81 × 4.33" - Rugged Metal Enclosure
- 24-28 / 48V-56V_{OUT} +with 85~93% Efficiency
- -25°C to 70°C Convection (Derate 2.5%/K>+60°C)
- Power Boost up to 120% (5 seconds)
- Power Good Signal



140-180 Watt TSP 140/180EX

- 4.33 × 4.33 × 2.13" - Rugged Metal Enclosure
- 12 & 24 & 48V_{OUT} with 87% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good
- +18% V_{OUT} Adjust Range



240 Watt TIB 240EX

- 4.89 × 1.89 × 4.50" - Rugged Metal Enclosure
- 24 / 48V_{OUT} +15% Adjust with 95% Efficiency
- -40°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



NEW!

240 Watt TSPC 240

- 4.33 × 2.36 × 4.33" - Rugged Metal Enclosure
- 24 & 48V_{OUT} with 85~93% Efficiency
- -25°C to 70°C Convection (Derate 2.5%/K>+60°C)
- Power Boost up to 120% (5 seconds)
- Power Good Signal



240 Watt TSPC 240UPS

- 4.72 × 4.49 × 3.94" - Rugged Metal Enclosure
- Integrated Power Supply + UPS System
- Single 24V_{OUT} at up to 12A (88~92% Efficiency)
- -25°C to +70°C Convection (Derate 2.5%/K>+60°C)
- Input / Output / Battery Alarm Outputs



360 Watt TSP 360EX

- 4.92 × 4.92 × 3.15" - Rugged Metal Enclosure
- 24 & 48V_{OUT} (+18% V_{ADJ} Range) with 87% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- EN60204 / EN60079 / Optional ATEX Compliance
- Remote On/Off & Power Good



480 Watt TIB 480EX

- 4.89 × 3.23 × 4.50" - Rugged Metal Enclosure
- 24 / 48V_{OUT} +15% Adjust with 95% Efficiency
- -25°C to +70°C Operation (see spec for derating)
- 150% Peak Load for 4 Seconds
- Power-back immunity
- 5 year warranty



NEW!

HARSH ENVIRONMENT

50 - 600 Watts

480 Watt

TSPC 480

- 4.33 × 5.91 × 4.53" - Rugged Metal Enclosure
- 24 & 48V_{OUT} with 85~93% Efficiency
- -25°C to 70°C Convection (Derate 2.5%/K>+60°C)
- Power Boost up to 120% (5 seconds)
- EN60204 / 50178 / 61558-2-16 and ATEX Compliant
- Power Good Signal



600 Watt

TSP 600EX

- 4.92 × 4.92 × 6.50" - Rugged Metal Enclosure
- 24 & 36 & 48V_{OUT} with 87% Efficiency
- -25°C to 70°C Convection (See Spec for Derating)
- Remote On/Off & Power Good
- +18% V_{ADJ} Range



DIN-RAIL MOUNT

DC/DC CONVERTERS

6 - 300 Watts

Traco Power's Chassis-Mount DC/DC Converters listed here offer optional DIN Rail Mounting Clips for easy installation into control panels.

6 Watt

TMDC 06

- 2.09 × 1.34 × 1.04" - Encapsulated Chassis Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single & Dual 5~48V_{OUT} with 81~85% Efficiency
- -40°C to +93°C Operation (Derate 4%/K>80°C)
- Optional DIN Rail Mounting Kit



NEW!

6 Watt

TMDC 06H

- 2.09 × 1.34 × 1.04" - Encapsulated Chassis Mount
- 2:1 Input Ranges (80-160 VDC)
- Single & Dual 5~48V_{OUT} with 79~84% Efficiency
- 3,000 VAC I/O Isolation (reinforced)
- -40°C to +93°C Operation (Derate 4%/K>80°C)
- Optional DIN Rail Mounting Kit



NEW!

10 Watt

TMDC 10

- 3.10 × 1.34 × 0.87" - Encapsulated Chassis Mount
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- Single 5~48V_{OUT} with 84~86% Efficiency
- Screw Terminal Connections
- -40°C to +87°C Operation (Derate 2.86%/K>70°C)
- Optional DIN Rail Mounting Kit



NEW!

10 Watt

TMDC 10H

- 3.10 × 1.34 × 0.87" - Encapsulated Chassis Mount
- 2:1 Input Range (80-160 VDC)
- Single and Dual 5.1~48V_{OUT} with 83~85% efficiency
- 3,000 VAC I/O Isolation (Reinforced)
- -40°C to +87°C Operation (Derate 2.86%/K>70°C)
- Optional DIN Rail Mounting Kit



NEW!

12 Watt

TCL 012-124DC

- 1.06 × 2.95 × 3.94" - Plastic Case
- 2:1 Input Ranges (9.5~18 VDC)
- 24V_{OUT} with ~86% Efficiency
- -25°C to +70°C Operation (Derate 1.5%/K>+50°C)
- 1,500 VDC I/O Isolation



DC/DC CONVERTERS

6 - 300 Watts

20 Watt

TEQ 20WIR

- 4.06 × 2.25 × 1.03" - Enclosed
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~24V_{OUT} with 86~88% Efficiency
- -40°C to +93°C Operation (see spec for derating)
- 2,250 VDC I/O Isolation



20 Watt

TMDC 20

- 3.78 × 2.13 × 0.92" - Plastic Encapsulated
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- 5 | 12 | 24 | 48V_{OUT} with 89~91% Efficiency
- -40°C to +90°C Operation (Derate 10%/K>+85°C)
- 2,500 VDC I/O Isolation
- Remote On/Off Control
- Optional DIN Rail Kit



20 Watt

TMDC 20H

- 3.78 × 2.13 × 0.92" - Encapsulated Chassis Mount
- 2:1 Input Ranges (80~160 VDC)
- Single & Dual 5~48V_{OUT} with 89~91% Efficiency
- -40°C to +95°C Operation (Derate 4.76%/K>84°C)
- Optional DIN Rail Mounting Kit
- 3,000 VDC I/O Isolation (reinforced)
- EN55032 Class A Filter
- Remote On/Off



NEW!

24 Watt

TCL 024DC

- 1.06 × 2.95 × 3.94" - Plastic Case
- 4:1 Input Ranges (18~75 VDC)
- 5 | 12 | 24V_{OUT} with ~86% Efficiency
- -25°C to +70°C Operation (Derate 1.5%/K>+50°C)
- 1,500 VDC I/O Isolation



40 Watt

TEQ 40WIR

- 4.06 × 2.25 × 1.03" - Enclosed + Heatsink
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~24V_{OUT} with 88~90% Efficiency
- -40°C to +92°C Operation (Derate 5.9%/K>+83°C)
- 3,000 VDC I/O Isolation
- Optional DIN Rail Mounting Kit



40 Watt

TMDC 40

- 4.41 × 2.51 × 1.01" - Plastic Encapsulated
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- 5 | 12 | 24 | 48V_{OUT} with 89~92% Efficiency
- -40°C to +85°C Operation (Derate 4.5%/K>+73°C)
- 2,500 VDC I/O Isolation
- Remote On/Off Control
- Optional DIN Rail Kit



40 Watt

TMDC 40H

- 4.41 × 2.51 × 1.01" - Encapsulated Chassis Mount
- 2:1 Input Ranges (80~160 VDC)
- Single & Dual 5~48V_{OUT} with 89~92% Efficiency
- -40°C to +90°C Operation (Derate 3.3%/K>+75°C)
- 3,000 VDC I/O Isolation (reinforced)
- EN55032 Class A Filter
- Remote On/Off
- Optional DIN Rail Mounting Kit



60 Watt

TCL 060DC

- 1.77 × 2.95 × 3.94" - Plastic Case
- 4:1 Input Ranges (18~75 VDC)
- 12 | 24V_{OUT} with ~86% Efficiency
- -25°C to +70°C Operation (Derate 2%/K>+40°C)
- 1,500 VDC I/O Isolation



60 Watt

TMDC 60

- 4.41 × 2.67 × 1.50" - Plastic Encapsulated
- 4:1 Input Ranges (9~36 | 18~75 VDC)
- 5 | 12 | 24 | 48V_{OUT} with 90~92% Efficiency
- -40°C to +85°C Operation (Derate 3.3%/K>+70°C)
- 2,500 VDC I/O Isolation
- Remote On/Off Control
- Optional DIN Rail Kit



60 Watt

TMDC 60H

- 4.41 × 2.67 × 1.50" - Plastic Encapsulated
- 2:1 Input Ranges (80~160 VDC)
- 5 | 12 | 24 | 48V_{OUT} with 90~92% Efficiency
- -40°C to +90°C Operation (Derate > +70°C)
- 3,000 VDC I/O Isolation (reinforced)
- Remote On/Off
- DIN Rail Kit



75 Watt

TEP 75WICM(F)

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 87~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & VTrim Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation



100 Watt

TEP 100CM(F)

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 2:1 Input Ranges (9~18 | 18~36 | 36~75 VDC)
- Single 3.3~48V_{OUT} with 90~93% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & VTrim Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation



DC/DC CONVERTERS

6 - 300 Watts

100 Watt TEP 100WIRCM(F)

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 5~48V_{OUT} with 90~93% Efficiency
- -40°C to +85°C Ambient (Derate 4%/K>+65°C)
- Remote On/Off, Sense & VTrim Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation



100 Watt TEQ 100WIR

- 4.06 × 3.50 × 3.45" - Sealed Metal Case
- 4:1 Input Ranges (10~36 | 19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with ~90% Efficiency
- -40°C to +105°C Ambient (Derate 5%/K>+85°C)
- Optional DIN Rail Clip
- Remote On/Off & Sense Functions
- 2,250 VDC I/O Isolation



150 Watt TEP 150WI(F)

- 3.86 × 2.56 × 1.60" - Sealed Metal Case
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 86~89% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Constant current output for battery load applications
- Remote On/Off & V_{TRIM} Function
- 2,250 VDC I/O Isolation
- Optional Class B EMI Filter (not shown)



150-196 Watt TEP 160CM(F)

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 2:1 Input Ranges (16.5~36 | 33~75 VDC)
- Single 12~48V_{OUT} with 92~93% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & VTrim Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250VDC I/O Isolation



142-182 Watt TEP 160WIRCM(F)

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 90~91% Efficiency
- -40°C to +75°C Ambient (Derate 1.8%/K>+60°C)
- Remote On/Off, Sense & VTrim Functions
- Optional Class A Filter (as shown) & DIN Rail Clip
- 2,250 VDC I/O Isolation



160 Watt TEQ 160WIR

- 4.00 × 3.50 × 3.92" - Sealed Metal Case
- 4:1 Input Ranges (19~36 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~90% Efficiency
- -40°C to +75°C Ambient (Derate 3.7%/K>+78°C)
- Optional DIN Rail Clip
- Remote On/Off & Sense Functions
- 2,250 VDC I/O Isolation



180-240 Watt TEP 200WIRCM(F)

- 3.35 × 2.40 × 1.53" - Baseplate Cooled
- 4:1 Input Ranges (9~36 | 18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~91% Efficiency
- -40°C to +75°C Ambient (See Spec for Derating)
- Remote On/Off, Sense & VTrim Functions
- 2,250 VDC I/O Isolation
- Optional Class A Filter (as shown) & DIN Rail Clip



200 Watt TEQ 200WIR

- 4.06 × 3.45 × 3.50" - Sealed Metal Case
- 4:1 Input Ranges (19~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~90% Efficiency
- -40°C to +105°C Ambient (Derate 2.85%/K>70°C)
- Optional DIN Rail Clip
- Remote On/Off & Sense Functions
- 2,250 VDC I/O Isolation



300 Watt TEQ 300WIR

- 6.00 × 4.00 × 1.52" - Sealed Metal Case
- 4:1 Input Ranges (18~75 | 43~160 VDC)
- Single 12~48V_{OUT} with 89~92% Efficiency
- -40°C to +80°C Ambient (Derate 2.2%/K>+60°C)
- Remote On/Off, Sense & Current Share Functions
- 3,000 VDC I/O Isolation



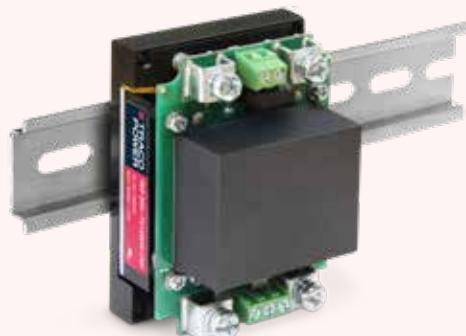
Chassis Mount DC/DC Converters with optional DIN Rail Clips

TEP Models:

- TEP 75WI-CM(F)
- TEP 100CM(F)
- TEP 100WIRCM(F)
- TEP 160CM(F)
- TEP 160WIRCM(F)
- TEP 200WIRCM(F)

TEQ Models:

- TEQ 20WIR
- TEQ 40WIR
- TEQ 100WIR
- TEQ 160WIR
- TEQ 200WIR
- TEQ 300WIR





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