# SIEMENS

### Data sheet

Product type designation

# 6GK5528-0AR00-2AR2

## SCALANCE XR528-6M

SCALANCE XR528-6M; MANAGED IE SWITCH; LAYER 3 INTEGRATED; 19" RACK; PORTS FRONT SIDE; 4 X 1000/10000MBIT/S SFP PLUS; 6 X 100/1000MBIT/S 4-PORT-MEDIA MODULE, ELECTRICAL, ELECTRICAL POE OR OPTICAL; LED-DIAGNOSTICS; FAULT SIGNAL CONTACT; SELECT/SET-BUTTON; PROFINET-IO DEVICE; NETWORK MANAGEMENT; INTEGRATED REDUNDANCY MANAGER; OFFICE FEATURES (RSTP, VLAN, IGMP,...); C-PLUG IN THE SCOPE OF SUPPLY



Transmission rate	
Transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10 Gbit/s
Interfaces / for communication / integrated	
Number of electrical connections	
<ul> <li>for Power-over-Ethernet / for network</li> </ul>	12
components or terminal equipment	
Number of electrical connections	
• for SFP+	4
Interfaces / for communication / pluggable / maximum	
Number of 100 Mbit/s ST(BFOC) ports	
<ul> <li>for multimode</li> </ul>	24
• for single mode (LD)	24
Number of 1000 Mbit/s SC ports	
• for multimode	24
• for single mode (LD)	24
Number of electrical connections	
• for SFP	4

• for SFP+

Interfaces / others	
Number of electrical connections	
<ul> <li>for operator console</li> </ul>	1
<ul> <li>for management purposes</li> </ul>	1
<ul> <li>for signaling contact</li> </ul>	1
● for media module	6
<ul> <li>for power supply</li> </ul>	1
<ul> <li>for redundant voltage supply</li> </ul>	1
Type of electrical connection	
<ul> <li>for operator console</li> </ul>	RJ11 port
<ul> <li>for management purposes</li> </ul>	RJ45 port
<ul> <li>for signaling contact</li> </ul>	2-pole terminal block
<ul> <li>for power supply</li> </ul>	4-pole terminal block
design of the removable storage	
• C-PLUG/KEY-PLUG	Yes
Product feature / hot-swappable interface modules	Yes
Signal-Inputs/outputs	
Operating voltage / of the signaling contacts	
• at DC / Rated value	24 V
Operating current / of the signaling contacts	
• at DC / maximum	0.1 A
Supply voltage, current consumption, power loss	
Type of voltage supply / redundant power supply unit	No
Type of voltage / of the supply voltage	DC
Supply voltage	
• external	24 V
• external	24 V 19.2 28.8 V
external     Product component / fusing at power supply input	19.2 28.8 V Yes
<ul> <li>external</li> <li>Product component / fusing at power supply input</li> <li>Fuse protection type / at input for supply voltage</li> </ul>	19.2 28.8 V Yes F 15 A / 125 V
external     Product component / fusing at power supply input     Fuse protection type / at input for supply voltage     Consumed current / maximum	19.2 28.8 V Yes
external Product component / fusing at power supply input Fuse protection type / at input for supply voltage Consumed current / maximum Supplied active power / of PSE / with PoE	19.2 28.8 V Yes F 15 A / 125 V 11.5 A
external     Product component / fusing at power supply input     Fuse protection type / at input for supply voltage     Consumed current / maximum     Supplied active power / of PSE / with PoE         • per port / maximum	19.2 28.8 V Yes F 15 A / 125 V 11.5 A 30 W
external Product component / fusing at power supply input Fuse protection type / at input for supply voltage Consumed current / maximum Supplied active power / of PSE / with PoE	19.2 28.8 V Yes F 15 A / 125 V 11.5 A
external     Product component / fusing at power supply input     Fuse protection type / at input for supply voltage     Consumed current / maximum     Supplied active power / of PSE / with PoE         e per port / maximum     e total / maximum     Permitted ambient conditions	19.2 28.8 V Yes F 15 A / 125 V 11.5 A 30 W
external     Product component / fusing at power supply input     Fuse protection type / at input for supply voltage     Consumed current / maximum     Supplied active power / of PSE / with PoE         e per port / maximum         total / maximum     Permitted ambient conditions     Ambient temperature	19.2 28.8 V Yes F 15 A / 125 V 11.5 A 30 W 180 W
external     Product component / fusing at power supply input     Fuse protection type / at input for supply voltage     Consumed current / maximum     Supplied active power / of PSE / with PoE         e per port / maximum         total / maximum     Permitted ambient conditions     Ambient temperature         e during operation	19.2 28.8 V Yes F 15 A / 125 V 11.5 A 30 W 180 W
<ul> <li>external</li> <li>Product component / fusing at power supply input</li> <li>Fuse protection type / at input for supply voltage</li> <li>Consumed current / maximum</li> <li>Supplied active power / of PSE / with PoE</li> <li>per port / maximum</li> <li>total / maximum</li> <li>Permitted ambient conditions</li> <li>Ambient temperature</li> <li>during operation</li> <li>during storage</li> </ul>	19.2 28.8 V Yes F 15 A / 125 V 11.5 A 30 W 180 W 0 60 °C -40 +70 °C
external     Product component / fusing at power supply input     Fuse protection type / at input for supply voltage     Consumed current / maximum     Supplied active power / of PSE / with PoE         e per port / maximum     e total / maximum     Permitted ambient conditions     Ambient temperature     e during operation	19.2 28.8 V Yes F 15 A / 125 V 11.5 A 30 W 180 W

Relative humidity	_
<ul> <li>at 25 °C / without condensation / during</li> </ul>	95 %
operation / maximum	
Protection class IP	IP20
Design, dimensions and weight	
Design	19" rack
Number of modular height units / relating to 19-inch cabinet	2
Width	449 mm
Height	87.2 mm
Depth	305 mm
Net weight	10 kg
Mounting type	
<ul> <li>19-inch installation</li> </ul>	Yes
<ul> <li>35 mm DIN rail mounting</li> </ul>	No
wall mounting	No
<ul> <li>S7-300 rail mounting</li> </ul>	No
• S7-1500 rail mounting	No
Type of cable outlet	Cable outlet at front
Product properties, functions, components / genera	al
Cascading in cases of star topology	any (depending only on signal propagation time)
Product functions / management, configuration	
Product functions / management, configuration Product function	
	Yes
Product function	Yes Yes
Product function  CLI	
Product function <ul> <li>CLI</li> <li>web-based management</li> <li>MIB support</li> </ul>	Yes
Product function • CLI • web-based management • MIB support • TRAPs via email	Yes Yes
Product function • CLI • web-based management • MIB support	Yes Yes Yes
Product function • CLI • web-based management • MIB support • TRAPs via email • Configuration with STEP 7 • RMON	Yes Yes Yes
Product function • CLI • web-based management • MIB support • TRAPs via email • Configuration with STEP 7 • RMON • Port mirroring	Yes Yes Yes Yes
Product function • CLI • web-based management • MIB support • TRAPs via email • Configuration with STEP 7 • RMON • Port mirroring • multiport mirroring	Yes Yes Yes Yes Yes Yes
Product function • CLI • web-based management • MIB support • TRAPs via email • Configuration with STEP 7 • RMON • Port mirroring • multiport mirroring • CoS	Yes Yes Yes Yes Yes Yes
Product function • CLI • web-based management • MIB support • TRAPs via email • Configuration with STEP 7 • RMON • Port mirroring • multiport mirroring • CoS • PROFINET IO diagnosis	Yes Yes Yes Yes Yes Yes Yes
Product function • CLI • web-based management • MIB support • TRAPs via email • Configuration with STEP 7 • RMON • Port mirroring • multiport mirroring • coS • PROFINET IO diagnosis • switch-managed	Yes Yes Yes Yes Yes Yes Yes
Product function  CLI  web-based management  MIB support  TRAPs via email  Configuration with STEP 7  RMON  Port mirroring  multiport mirroring  CoS  PROFINET IO diagnosis  switch-managed  Telegram length / for Ethernet / maximum	Yes Yes Yes Yes Yes Yes Yes
Product function  CLI  web-based management  MIB support  TRAPs via email  Configuration with STEP 7  RMON  Port mirroring  multiport mirroring  CoS  PROFINET IO diagnosis  switch-managed  Telegram length / for Ethernet / maximum  Protocol / is supported	Yes Yes Yes Yes Yes Yes Yes Yes Yes
Product function  CLI  web-based management  MIB support  TRAPs via email  Configuration with STEP 7  RMON  Port mirroring  multiport mirroring  CoS  PROFINET IO diagnosis  switch-managed  Telegram length / for Ethernet / maximum  Protocol / is supported  Telnet	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Product function  CLI  web-based management  MIB support  TRAPs via email  Configuration with STEP 7  RMON  Port mirroring  Multiport mirroring  CoS  PROFINET IO diagnosis  switch-managed  Telegram length / for Ethernet / maximum  Protocol / is supported  Telnet HTTP	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Product function  CLI  web-based management  MIB support  TRAPs via email  Configuration with STEP 7  RMON  Port mirroring  multiport mirroring  CoS  PROFINET IO diagnosis  switch-managed  Telegram length / for Ethernet / maximum  Protocol / is supported  Telnet  HTTP HTTPS	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Product function  CLI  web-based management  MIB support  TRAPs via email  Configuration with STEP 7  RMON  Port mirroring  multiport mirroring  CoS  PROFINET IO diagnosis  switch-managed  Telegram length / for Ethernet / maximum  Protocol / is supported  Telnet HTTP	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes

• BOOTP	Yes
• GMRP	Yes
	Yes
• DCP	Yes
• LLDP	
IGMP (snooping/querier)	Yes
Identification & maintenance function	N .
<ul> <li>I&amp;M0 - device-specific information</li> </ul>	Yes
<ul> <li>I&amp;M1 – higher-level designation/location designation</li> </ul>	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
Product functions / Diagnosis	
Product function	
<ul> <li>Port diagnostics</li> </ul>	Yes
<ul> <li>Statistics Packet Size</li> </ul>	Yes
<ul> <li>Statistics packet type</li> </ul>	Yes
Error statistics	Yes
<ul> <li>SysLog</li> </ul>	Yes
Product functions / VLAN	
Product function	N .
<ul> <li>VLAN - port based</li> </ul>	Yes
<ul> <li>VLAN - protocol-based</li> </ul>	Yes
<ul> <li>VLAN - IP-based</li> </ul>	Yes
VLAN dynamic	Yes
Number of VLANs / maximum	255
Number of VLANs - dynamic / maximum	255
Protocol / is supported / GVRP	Yes
Product functions / DHCP	
Product function	
DHCP client	Yes
DHCP Option 82	Yes
DHCP Option 66	Yes
DHCP Option 67	Yes
Product functions / Routing	
Product functions / Routing Service / Routing / Note	Yes IP routing integrated, IPv6 available soon
Product functions / Routing Service / Routing / Note Product function	IP routing integrated, IPv6 available soon
Product functions / Routing Service / Routing / Note	

<ul> <li>dynamic IP routing</li> </ul>	Yes
dynamic IP routing IPv6	No
Protocol / is supported	
• RIPv2	Yes
RIPnG for IPv6	No
OSPFv2	Yes
OSPFv3 for IPv6	No
• VRRP	Yes
VRRP for IPv6	No
Product functions / Redundancy	
Product function	
Ring redundancy	Yes
<ul> <li>High Speed Redundancy Protocol (HRP)</li> </ul>	Yes
<ul> <li>high speed redundancy protocol (HRP) with redundancy manager</li> </ul>	Yes
<ul> <li>high speed redundancy protocol (HRP) with standby redundancy</li> </ul>	Yes
Protocol / is supported / Media Redundancy Protocol	Yes
(MRP)	
Product function	
<ul> <li>media redundancy protocol (MRP) with redundancy manager</li> </ul>	Yes
<ul> <li>redundancy procedure STP</li> </ul>	Yes
<ul> <li>redundancy procedure RSTP</li> </ul>	Yes
<ul> <li>redundancy procedure MSTP</li> </ul>	Yes
Passive listening	Yes
Protocol / is supported	
• LACP	Yes
Product functions / Security	
Product function	
ACL - MAC-based	Yes
<ul> <li>ACL - port/MAC-based</li> </ul>	Yes
• IEEE 802.1x (radius)	Yes
<ul> <li>Broadcast/Multicast/Unicast Limiter</li> </ul>	Yes
<ul> <li>broadcast blocking</li> </ul>	Yes
Protocol / is supported	
• SSH	Yes
Product functions / Time	
Product function	
<ul> <li>SICLOCK support</li> </ul>	Yes
Protocol / is supported	

● NTP	Yes
• SNTP	Yes
Type of time synchronization	IEEE 1588 available soon

Standards, specifications, approvals	
Standard	
• for FM	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4
<ul> <li>for hazardous zone</li> </ul>	EN 60079-0: 2009, EN60079-15: 2010, II 3 G Ex nA IIC T4 Gc, KEMA 07 ATEX 0145 X
<ul> <li>for safety / from CSA and UL</li> </ul>	UL 60950-1, CSA C22.2 No. 60950-1-03
<ul> <li>for hazardous zone / from CSA and UL</li> </ul>	ISA 12.12.01-2012 (Hazardous Location), Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4
<ul> <li>for emitted interference</li> </ul>	EN 61000-6-4 (Class A)
<ul> <li>for interference immunity</li> </ul>	EN 61000-6-2
Certificate of suitability / CE marking	Yes
Certificate of suitability	EN 61000-6-2, EN 61000-6-4
• C-Tick	Yes
• E1 approval	No
• E1 approval	No
<ul> <li>KC approval</li> </ul>	Yes
Further Information / Internet Links	

Internet-Link	
<ul> <li>to website: Selector SIMATIC NET SELECTION TOOL</li> </ul>	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Image database</li> </ul>	http://automation.siemens.com/bilddb
<ul> <li>to website: CAx Download Manager</li> </ul>	http://www.siemens.com/cax
<ul> <li>to website: Industry Online Support</li> </ul>	https://support.industry.siemens.com

Security information

#### Security information

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