

STG-550

CAN Mini-PLC
graphically
programmable

3 ANALOG INPUT	2 DIGITAL INPUT	4 POWER OUTPUT	1 POWER PWM
CAN BUS	TTL-232	SOLID STATE	STATUS LED
miCon-L	7..32V=	°C -40/+70	SHOCK PROOF



FEATURES

- Small and universal CAN Logic Controller
- 3 analog Inputs 0 to 30 VDC, 12 bit ADC
- 2 digital Inputs up to 1 kHz
- 4 Power Outputs up to 1.5 A
- 1 Power PWM Output 2 A/1 to 10 kHz
- 1 CAN 2.0A/B Interface
- Reliable Solid-State Outputs
- Fail Safe Oscillator
- Programmable Status LED
- TTL-232/USB Connection to PC
- Intuitive graphical Programming Capability
- Wide Operating Voltage Range 7 to 32 VDC
- Wide Operating Temp. Range -40 to +70°C
- Vibration resistant and rugged Sealing
- Universal Aluminium Mounting Plate
- Engineered and manufactured in Germany

APPLICATIONS

- Industrial Automation
- Building Automation
- Automotive and Maritime Technology
- Environmental Technology
- Light and Show Technology

DESCRIPTION

The innovative STG-550 extends the established BARTH® Mini-PLC series with a additional model featuring a rugged CAN interface with graphical programming capability.

With similar dimensions in comparison to the STG-500, the STG-550 provides outstanding graphical programming at lowest current consumption and the well-known small form factor.

The CAN bus allows the user to connect a variety of network components to the Mini-PLC, for example: displays, stepper motors or CAN sensors.

The STG-550 does not need any peripheral components to operate. Both inputs and outputs features highly integrated and rugged protection circuits to operate the Mini-PLC in really harsh environment.

These outstanding features open up a variety of application fields in industrial, automotive and 12/24V battery-powered applications.

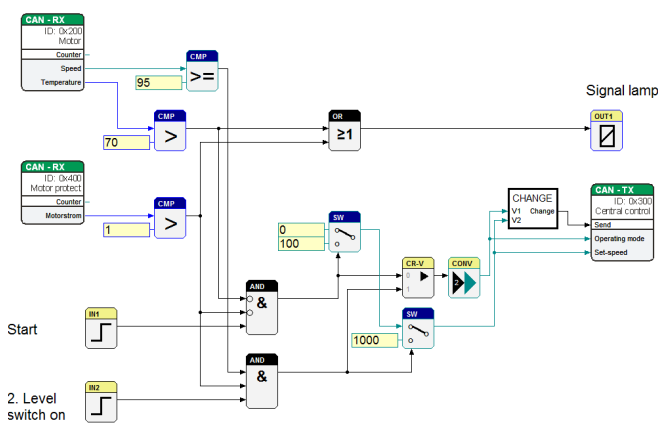
The STG-550 is also available as customer-tailored OEM version.

STG-550

PROGRAMMING WITH MICON-L

Without learning a difficult programming language the Mini-PLC can be easily programmed using simple and vivid graphical function blocks. This block design meets graphical standards of the latest graphical programming languages.

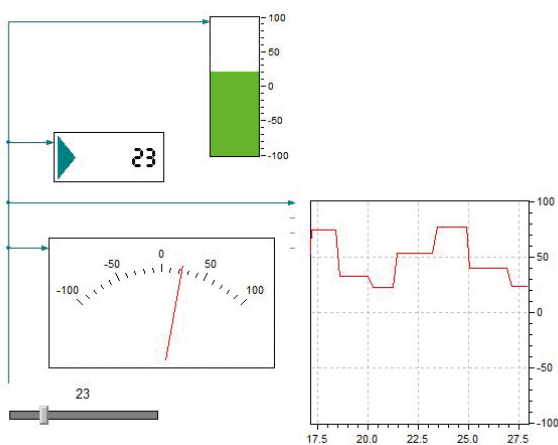
The miCon-L software suite features programming, simulation and test in one unique software design tool. The flexible programming option offers a variety of possibilities in industrial, automotive and maritime applications.



Programming the STG-550 follows using the USB port of your PC with installed miCon-L software suite and the VK-16 USB Connection Cable.

The miCon-L Software supports full simulation and visualisation operation modes.

miCon-L provides a variety of visualisation blocks and interactive elements to control and debug the Mini-PLC.



SPECIFICATIONS

Operation Voltage	7 to 32 VDC
Current Consumption	nominal 15 mA at 32 VDC (depending on configuration)
Fusing	5 A max. (external)
CAN	CAN 2.0A (11 bit ID) CAN 2.0B (29 bit ID), 100, 125, 250, 500 kbit
Digital Input IN1 - IN2	$U_{IN} = 0$ to 30 VDC, $R_I > 30$ kOhm $U_{LOW} \leq 5$ VDC, $U_{HIGH} > 5$ VDC $f_{IN} \leq 1$ kHz, $t_{IN} \geq 1$ ms
Analog Input IN3 - IN5	$U_{IN} = 0$ to 30 VDC, $R_I > 11$ kOhm
Accuracy ADC	$\pm 1\%$ ($< 0,25$ VDC) 12 Bit
Digital Output OUT1 - OUT4	$I_{OUT} \leq 1.5$ A (resistive load) @ $f_{OUT} = 0$ to 100 Hz $U_{OUT} \geq U_{IN} - 0,45$ V, $I_{TOT} \leq 4$ A
PWM Output OUT5	$I_{OUT} \leq 2$ A (resistive load) @ $f_{OUT} = 1$ kHz to 10 kHz $U_{OUT} \leq GND + 0,25$ V
Security Features	Watchdog (WD) Fail safe oscillator (FSO) Brown out detection (BOD) Power up timer (PUT)
Conformity	2006/95/EG, 2004/108/EG EN60730-1, EN61010-1, EN50081-1, EN50082-1 EN 60068-2-78: 2002 EN 60068-2-6: 2008 ISO 16750-3: 2007
Electrical Connection	pluggable spring terminal connectors 0.25 to 1.5 mm ²
Operation Temperature	-40 to +70 °C (IEC 60068-2-1/2)
Storage Temperature	-40 to +70 °C (IEC 60068-2-1/2)
Shock Resistance	min. 100 m/s ² (10G)
Vibration Resistance	min. 50 m/s ² (5G) @ 10 to 100 Hz
Protection Grade	IP 20
Housing Material	Acrylnitril-Butadien-Styrol (ABS)
Potting Material	Polyurethane (PU)
Weight	50 g (without connectors)
Dimensions	40 x 40 x 22 mm (LxWxH) without connectors
Ordering Information Mini-PLC	Mini-SPS STG-550 Art.-No. 0850-0550
Ordering Information Accessory	Connection Cable VK-16 USB Art.-No. 0091-0016

DOCUMENTS & SOFTWARE

Detailed documents, videos and tutorials:

www.barth-elektronik.de

www.micon-l.de

Programming and Simulation Software miCon-L:

www.barth-elektronik.de/download/9045-0008-A.zip