









STG-500

Mini-PLC
graphically
programmable

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



FEATURES

- Small and universal Logic Controller
- 3 analog Inputs 0..30 VDC
- 2 digital Inputs up to 1 kHz
- 4 Power Outputs up to 1.5 A
- 1 Power PWM Output 2 A/1..5 kHz
- Reliable Solid-State Outputs
- Programmable Status LED
- RS232 Connection to PC
- Integrated Temperature Sensor
- Intuitive graphical Programming Capability
- Wide Operating Voltage Range 7..32 VDC
- Wide Operating Temp. Range -40..+70°C
- Vibration resistant and rugged Sealing
- Very low Current Consumption
- Universal Aluminium Mounting Plate

APPLICATIONS

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

DESCRIPTION

The STG-500 is a highly integrated programmable logic controller providing outstanding graphical programming capability at lowest current consumption and small form factor.

With its cutting edge features the STG-500 opens up completely new application fields with space restrictions and high integration level requirements.

The STG-500 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 harsh environment.

Due to its extremely low current consumption and wide operation voltage range the STG-500 is well suitable for 12 and 24 V battery-powered systems.

These outstanding features open up a variety of application fields in industrial, automotive and maritime technology.

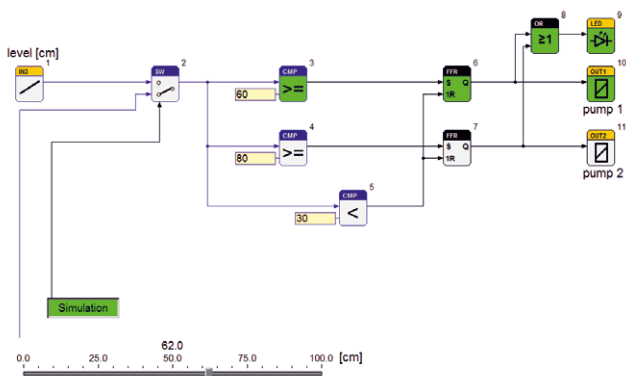
The STG-500 is also available as customer-tailored OEM version.

STG-500

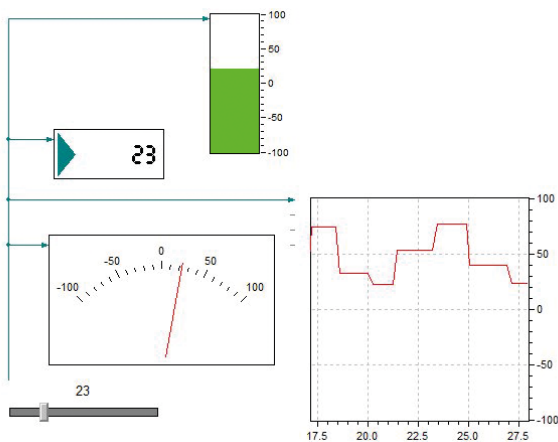
PROGRAMMING WITH MICON-L

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-500 follows using the RS232 port of your PC with installed miCon-L software suite. An USB-to-RS232 Adapter is also available. 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

| | |
|---------------------------------------|---|
| Design | Mini-PLC fully enclosed in resin filled housing with plugable spring terminal connectors |
| Programming | miCon-L (graphical) via RS232 |
| Operation Voltage | 7..32 VDC |
| Current Consumption | < 4 mA at 32 VDC (Status LED off) |
| Fusing | 5 A max. (external) |
| Digital Input IN1 - IN2 | $U_{IN} = 0..30$ 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 | $U_{IN} = 0..30$ VDC, $R_i > 11$ kOhm |
| Accuracy ADC IN3 - IN5 | $\pm 3\%$ (0.5 VDC) 10 Bit |
| Digital Output OUT1 - OUT4 | $I_{OUT} \leq 1,5$ A (resistive load) @ $f_{OUT} = 0..100$ Hz $U_{OUT} \geq U_{IN} - 0,45$ V $I_{TOT} \leq 4$ A |
| PWM Output OUT5 | $I_{OUT} \leq 2$ A (resistive load) @ $f_{OUT} = 0..100$ Hz $I_{OUT} \leq 1$ A (resistive load) @ $f_{OUT} = 100$ Hz..5 kHz $U_{OUT} \leq GND + 0,25$ V |
| Security Features | Watchdog (WD) 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 | plugable spring terminal connectors 0,25..1,5 mm ² |
| Operation Temperature | -40..+70 °C (IEC 60068-2-1/2) |
| Storage Temperature | -40..+70 °C (IEC 60068-2-1/2) |
| Shock Resistance | min. 100 m/s ² (10G) |
| Vibration Resistance | min. 50 m/s ² (5G) @ 10..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-500 Art.-No. 0850-0500 |
| Ordering Information Accessory | Connection Cable VK-10 RS232 Art.-No. 0091-0010 |

DOCUMENTS & SOFTWARE

Detailed information and additional documents relating to this product are downloadable from

www.barth-elektronik.de

Programming and Simulation Software miCon-L

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