









# STG-600

Mini-PLC  
graphically  
programmable

8 ANALOG INPUT	2 DIGITAL INPUT	8 POWER OUTPUT	1 POWER PWM
 SOLID STATE	 STATUS LED	 USB	 miCon-L
 7..32V=	 °C -40/+60	 ULTRA FLAT	 SHOCK PROOF



## FEATURES

- Small and universal Logic Controller
- 8 analog Inputs 0..30 VDC
- 2 digital Inputs up to 10 kHz
- 8 Power Outputs up to 1.5 A
- 1 Power PWM Output 2 A/0..10 kHz
- Reliable Solid-State Outputs
- Programmable Status LED
- USB Connection to PC
- Intuitive graphical Programming Capability
- Wide Operating Voltage Range 7..32 VDC
- Wide Operating Temp. Range -40...+60°C
- Ultraflat Housing, Height 10 mm
- Vibration resistant and rugged Sealing
- Very low Current Consumption

## APPLICATIONS

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

## DESCRIPTION

The STG-600 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-600 opens up completely new application fields with space restrictions and high integration level requirements.

The STG-600 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-600 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.

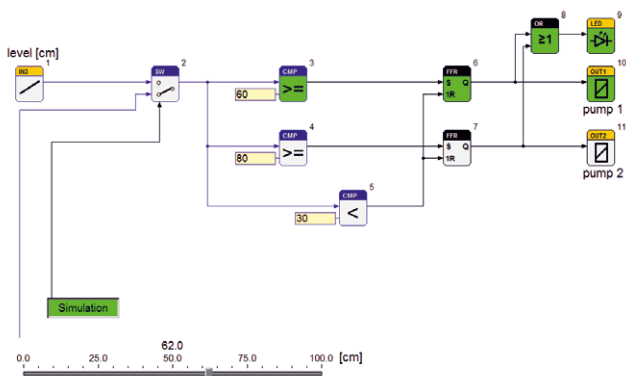
The STG-600 is also available as customer-tailored OEM version.

# STG-600

## PROGRAMMING WITH MICON-L

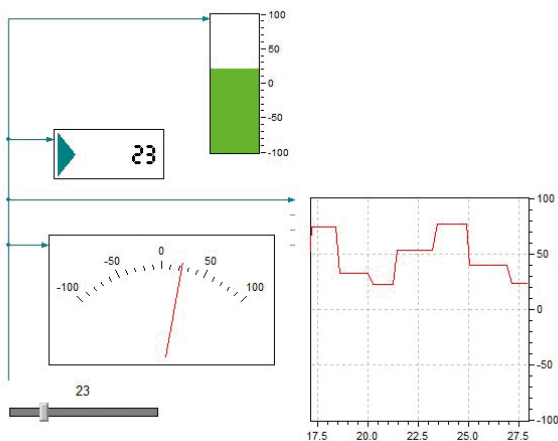
Without learning a difficult programming language the Mini-PLC can be easily programmed using simple and vivid graphical function blocks. This block design meets graphical standards of the latest graphical programming languages.

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-600 follows using the USB port of your PC with installed miCon-L software suite. miCon-L also supports full simulation and visualisation operation modes.

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



## SPECIFICATIONS

<b>Design</b>	Mini-PLC fully enclosed in resin filled housing with pluggable spring terminal connectors
<b>Programming</b>	miCon-L (graphical) via USB
<b>Operation Voltage</b>	7..32 VDC
<b>Current Consumption</b>	< 4 mA at 32 VDC (Status-LED off)
<b>Fusing</b>	8 A max. (external)
<b>Digital Input IN1 - IN2</b>	$U_{IN} = 0..30$ VDC, $R_i > 30$ kOhm $U_{LOW} \leq 5$ VDC, $U_{HIGH} > 5$ VDC $f_{IN} \leq 1$ kHz, $t_{IN} \geq 1$ ms
<b>Analog Input IN3 - IN10</b>	$U_{IN} = 0..30$ VDC, $R_i > 11$ kOhm
<b>Accuracy ADC IN3 - IN10</b>	$\pm 3\%$ (0.5 VDC) 10 Bit
<b>Digital Output OUT1 - OUT8</b>	$I_{OUT} \leq 1,5$ A (resistive load) @ $f_{OUT} = 0..100$ Hz $U_{OUT} \geq U_{IN} - 0,45$ V, $I_{TOT} \leq 4$ A
<b>PWM Output OUT9</b>	$I_{OUT} \leq 2$ 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
<b>Security Features</b>	Watchdog (WD) Brown out detection (BOD) Power up timer (PUT)
<b>Conformity</b>	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
<b>Electrical Connection</b>	pluggable spring terminal connectors 0,25..1,5 mm <sup>2</sup>
<b>Operation Temperature</b>	-40..+60 °C (IEC 60068-2-1/2)
<b>Storage Temperature</b>	-40..+70 °C (IEC 60068-2-1/2)
<b>Shock Resistance</b>	min. 100 m/s <sup>2</sup> (10G)
<b>Vibration Resistance</b>	min. 50 m/s <sup>2</sup> (5G) @ 10..100 Hz
<b>Protection Grade</b>	IP 20
<b>Housing Material</b>	Polymethylmethacrylat (PMMA)
<b>Potting Material</b>	Polyurethane (PU)
<b>Weight</b>	80 g (without connectors)
<b>Dimensions</b>	93 x 45 x 15 mm (LxWxH) Height housing: 10 mm
<b>Ordering Information Mini-PLC</b>	Mini-SPS STG-600 Art.-No. 0850-0600
<b>Ordering Information Accessory</b>	Connection cable VK-12 USB Art.-No. 0091-0012

## DOCUMENTS & SOFTWARE

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

[www.barth-elektronik.de](http://www.barth-elektronik.de)

Programming and Simulation Software miCon-L

[www.barth-elektronik.de/download/9045-0008-A.zip](http://www.barth-elektronik.de/download/9045-0008-A.zip)