

Series	Digital inputs	Digital outputs	Relay outputs	Analog inputs	Analog outputs	Communication
S10X	5	5	0	1	1	1× RS485 1× Ethernet 10/100 1× 1Wire bus

Model	CPU	RAM	Others
S103	4 x 1.2 GHz	1 GB	WIFI+Bluetooth



### Basic properties:

- Power supply 24 V DC
- RTC with backup up to 7 days
- Linux operation system
- 1x 10/100 Ethernet
- 4x USB for connecting other devices WIFI, 3G, ...
- 1x RS485 galvanically isolated serial interface for connection of expansion and communication modules
- Direct Switch function
  - Rapid input responsive within the group –tens of  $\mu$ s
  - Available features: identity, negation, toggle
- Watchdog for monitoring running of the control system
- Multiple protocols
  - KNX Tunneling/Multicast/USB
  - Modbus TCP/RTU master/slave
  - SMTP
- REST-API
- 4x user-configurable LEDs
- Build-in Web server for display of user applications
- Compact size and easy installation on DIN rail

## WBox-S103

### Communication

Ethernet	1x 10/100BaseT
Serial channels	1x RS485, 1x 1-Wire
Transmission speed TS485	9.6 .. 115 kbps
Galvanic isolation RS485	Yes
Galvanic isolation 1-Wire	Yes

### Digital inputs

Number of inputs x groups	4 x 1
Common connector	DIGND
Functions of inputs	Signalization, Counter, Direct Switch
Operation range	5 – 24 V DC
Input voltage of log. 0	Max. 3,5 V DC
Input voltage of log. 1	Min. 4,5 V DC
Input resistance of log. 1	6 200Ω
Delay 0->1/1->0	20 μs / 60 μs

### Digital output

Number of outputs x groups	4 x 1
Common connector	DOGND
Galvanic isolation	No
Type of output	Transistor
Additional functions	PWM, frequency
Switchable voltage	5 – 50 V DC
Switchable current continual/pulse	750 mA / 1 A
Max. total current DO1.1-1.4	1A
Time to switch on/off	Typ. 130 ns / 20ns
Switching speed	Max. 200 kHz/8bit

### Dimensions and weight

Dimensions	72 x 90 x 59 mm
Weight	300 g

### Analog inputs

Number of inputs x groups	1 x 1
Common connector	AGND
Available functions	0 – 10 V 0 – 20 mA
Galvanic isolation	No
Resolution	12 bits
Conversion speed	10μs

### Analog outputs

Number of outputs x groups	1
Common connector	AGND
Available functions	A0 0 – 10V / 0 -20mA
Galvanic isolation	No
Resolution	12 bits
Conversion speed	1ms

### Power supply

Rated voltage – SELV	24 V DC
Voltage tolerance	-15% .. +25% 20,4 .. 30 V DC
Power consumption	Typ. 3W Max. 12W
Internal protection	Yes

### Installation and operating conditions

Operatin temperature	0°C .. +55°C
Storing temperature	-25°C..+70°C
Dielectrical strength	In accordance with EN 60950
Degree of protection IP (IEC 529)	IP20
Operation position	Horizontal
Installation	On 35mm DIN rail into distribution box
Connection	Pluggeable terminal blocks
Wire gauge	Max 2,5 mm <sup>2</sup>

### Standards compliance

EN 6095-1 ed.2
EN 61000-6-3 ed. 2
EN 55014-1 ed. 3
EN 55022 ed. 3
2006/95/EC
2004/108/ES
2014/35/EU
2014/30/EC