

Intelligent controller for building automation XMP-GA-BOX32

Communication module for connecting up to 32 in- / output modules

Fields of application

The XMP-GA-BOX32 is used as control and communication module in connection with the building automation system *Babylon Uranus*.

It allows the connection and control of up to 32 XMP-GA modules (binary /analogue in- and outputs) or up to 64 individual room controllers (XMP-IRC) with corresponding data points.



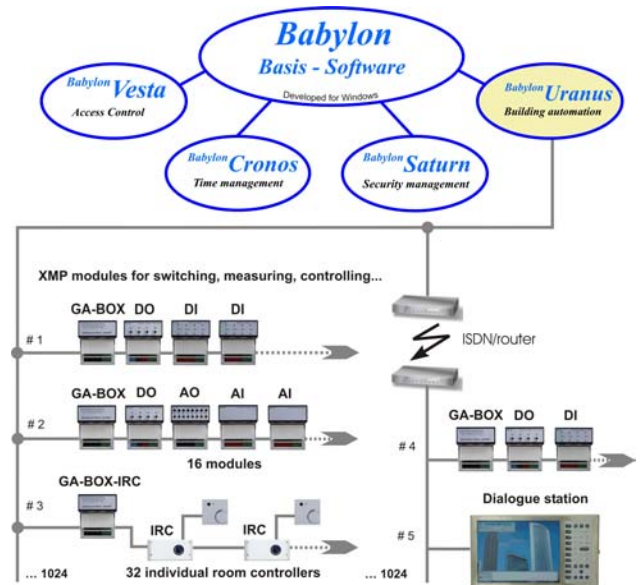
Functions, properties, variants

- 10 / 100Mbit Ethernet TCP / IP interface
- ICMP support (PING)
- hardware addressing with micro switches
- the GA-BOX IP address can be set by software from host computer
- world wide unique 12 digit Ethernet MAC address
- diagnosis of communication states by 12 LED's
- 2 LED's for „Battery low“ and „BATTERY failure“
- data bus to the modules is continued by internal termination connectors
- supply voltage by via termination connectors
- VIPS programs (functional blocks) can be downloaded into the XMP-GA-BOX

Technical data

Supply voltage:	24 V AC \pm 5%
	(field devices must be supplied by separate power supply!)
Power consumption:	approx. 300 mA
Power rating:	approx. 9.0 W
Interfaces	1 x TCP / IP (10 / 100Mbit) 2 x RS485 9600 Baud/19200 Baud asynchron (module bus)
Processor:	100MHz 80486 compatible CPU
Memory:	32 MB RAM 32 MB flash memory
Environment conditions:	Operation: from 0 to 50°C (from 32 to 122°F) Storage: from -40 to 70°C (from -40 to 158°F) 5 - 95% relative humidity, non-condensing
Dimensions:	(HxWxL) 150 x 114.5 x 135 mm
Weight:	Approx. 0.48 kg

XMP-GA-BOX32



Connection possibilities of XMP-GA modules

XMP - GA - BOX32	Controller module for GA in- and output modules as well as for individual room controllers
XMP-GA-12-DI	12 fold binary input module
XMP-GA-12-DO	12 fold binary output module
XMP-GA-12-DO-HAND	12 fold binary output module, with manual operating panel
XMP-GA-4-DO	4 fold binary output module
XMP-GA-4-DO-HAND	4 fold binary output module, with manual operating panel
XMP-GA-8-AI	8 fold analogue input module
XMP-GA-8-AO	8 fold analogue output module
XMP-GA-8-AO-HAND	8 fold analogue output module, with manual operating panel
XMP-GA-IRC-001	Individual room controller

Order number: XMP-GA-BOX32

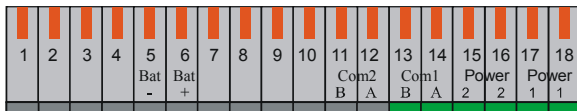
XMP-GA-BOX32

The flexible URANUS modules offer the optimal solution for planning building specific automation systems. The controller module communicates with the building management system BABYLON-XMP. It administrates up to 32 GA modules. The controller module is able to run standalone. The firmware can be downloaded in easy way. Optionally, an accumulator can be connected.

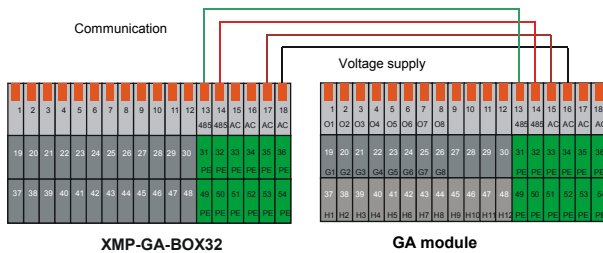
Characteristic curves / Eprom tables

Eprom table 00 (ST = 19): Ni1000 / TK5000
 Eprom table 01 (ST = 20): Pt1000
 Eprom table 02 (ST = 21): Pt100
 Eprom table 03 (ST = 22): Ni1000 / DIN

Termination connectors



Legend: Power : Power supply 24 V / AC
 Com 1 / 2: RS485 interfaces to GA modules (field)
 PE: Protected earth
 Bat: Termination connectors for accumulator



Hints for wiring:

Operating voltage and communication bus to the GA modules can be continued by the termination connector pairs of the GA-BOX32. In addition – for simplify wiring - the communication interface Com 1 is lead out by a termination connector at the side of the GA-BOX32. Per communication interface Com1 / Com 2 up to 16 GA modules can be connected. Both interfaces may **not** be connected to each other.

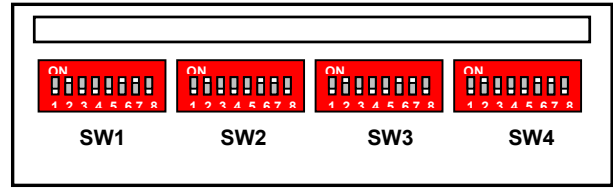
Data cables must be twisted paired and shielded! (e.g.: Y-STY or better)

Attention!

For connecting the operating voltage to the field devices the technical description of these devices must be considered.

The field devices must be supplied by a separate power supply, absolutely. Otherwise the XMP-GA module can be destroyed.

Micro switch settings:



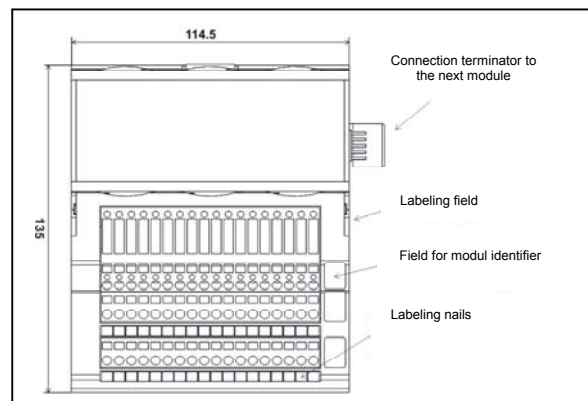
SW1/SW2: Setting the hardware address of the XMP-GA-BOX32:

Micro switch SW1: 1..8 SW2: 1..2	setting the hardware address (0..1023) of the XMP-GA-BOX32 SW 1 SW 2 example: 1 2 3 4 5 6 7 8 / 1 2 0 0 1 0 0 0 1 0 0 1 ⇨ address 580
SW2 Micro switch 3-5	reserved
SW2 Micro switch 6	FTP and Telnet server activated
SW2 Micro switch 7	Delete IP address (myip.dat, mygw.dat)
SW2 Micro switch 8	Software activated (always on On)

SW3/SW4:

Micro switch	Function
SW3: 1 , 2	Setting the Baud rate for Com1 9600 Baud (preset by factory) 1 = ON ; 2 = OFF → 9600 Baud 1 = OFF; 2 = ON → 19200 Baud
SW3: 3 , 4	Setting the Baud rate for Com2 9600 Baud (preset by factory) 3 = ON ; 4 = OFF → 9600 Baud 3 = OFF; 4 = ON → 19200 Baud
SW3: 5 .. 7	reserved
SW3: 8	On = GA-Box cold start
SW4: 1 .. 8	6 = buffer battery activated 7 = termination resistor COM 1 8 = termination resistor COM 2

Dimensions:



To prevent an exchange of the individual module types they are coded on mechanical way at the termination socket!

