PG-100-101-AA Modbus TCP to Modbus RTU Protocol Converter

PG-100-101-AA is highly powerful, superior, completely configurable and productive Building & Industrial Automation gateway for integrators to effortlessly interface devices to networks in commercial buildings and industrial plants.

PG-100-101-AA Gateway model supports Modbus TCP and Modbus RTU protocols. It is a Bi-directional Converter that can be configured as a Client and/or a Server on either protocol interface.

When configured as a Modbus RTU client, the PG-100-101-AA can read data from your Modbus RTU devices and publish it as Modbus TCP data. Also, it can write commands sent from the Modbus TCP side to the Modbus RTU devices.

When configured as a Modbus TCP client, the PG-100-101-AA can read data from your Modbus TCP devices and publish it as Modbus RTU data. Also, it can write commands sent from the Modbus RTU side to the Modbus TCP devices.

The PG-100-101-AA can be configured to behave as a server on both Modbus RTU and Modbus TCP interfaces. This mode is useful when data exchange is required between a Modbus RTU client (for eg. SCADA) and a BACnet IP client (for eg. a Building Management System).

PG-100-101-AA can be configured to behave as a client on both Modbus RTU and Modbus TCP interfaces.

PG-100-101-AA gateways have benefitted system integrators worldwide with its powerful line of gateways. Additionally, PG-100-101-AA gateway runs the same protocol conversion software on a productive and cost efficient platform backed by the experience, engineering expertise and technically proven support that integrators have come to expect from PG-100-101-AA.

Features

- Ability to interface upto 1000 points
- DIN rail mount optional
- DIP switches to select baud rate or node ID on the fly
- Multi-configuration capability
- BACnet COV support for fast data communication while reducing the traffic over a BACnet network

Specifications

Environment	Operating Temperature: -40 to 75° C (-40 to 167°F)	
	Relative Humidity:5-90% RH non-condensing	
Power Requirements	9-30 VDC or 12-24 VAC	
	Current Draw @ 12V about 250Ma	
Physical Dimensions(HxWxD)	4.5x2.9x1.6 in. (11.5x7.4x4.1 cm)	
	0.4 lbs (0.2 Kg)	
Other	Configuration/Diagnostic utilities	
	Capacity: 1000 points	
	Table,Wall or DIN rail mount	
Communication Interfaces	RS-485	-
	RS-232	-
	Ethernet 10Base-T, 100BASE-T[2]	1
	Mbus	-
	KNX	-
Approvals	TUV Approved to UL 916 and CSA C22.2 standards	
	BTL and LonMark certified	
	LonMark Certified	
	RoHS Compliant	
	GOST-R Certified	
	CE and FCC	

Modbus TCP Protocol Driver Description

PG-100-101-AA	Client	Nodes:1 Only 1 client node allowed on Multidrop systems
	Server	Nodes:255 Actual electrical loading may reduce number of usable Server nodes
Formal Driver Type	Ethernet Client or Server	
Connection Information	Connection Type:	Ethernet
	Ethernet Speed Supported:	10Base-T, 100Base-T[1]
Data Type Supported		
Command	**Description**	
01	Read Discrete Output Status (0xxxx)	
02	Read Discrete Input Status (1xxxx)	
03	Read Output Registers (4xxxx)	
04	Read Input Registers (3xxxx)	
05	Force Single Coil (0xxxx)	
06	Preset Single Register (4xxxx)	
15	Force Multiple Coils (0xxxx)	
16	Preset Multiple Registers (4xxxx)	
EX	Exception Status	
FF	FIFO	
Data Type	**Comments**	
ASCII	8-bit Character	
Digital	Digital	
Float	32-bit IEEE floating point	
Long	Unsigned 32-bit integer	
Signed	Signed 16-bit integer	
Slong	Signed 32-bit integer	
Unsigned	Unsinged 16-bit integer	

Modbus RTU

Modbus RTU Description

PG-100-101-AA Mode	Comments
Client	Nodes:1 Only 1 client node allowed on Multidrop systems
Server	Nodes:255 Actual electrical loading may reduce number of usable server nodes
Formal Driver Type	Serial
	Client or Server
Connection Information	Connection Type: RS-232 or RS-485(Two wire, half-duplex)
	Baud Rate: 110-115200, standard baud rates only
	Data Bits: 7,8
	Parity: Even, odd, None
	Multidrop Compatibility: Yes
Function Code Supported	
Function Codes	**Description**
01	Read Discrete Output Status (0xxxx)
02	Read Discrete Input Status (1xxxx)
03	Read Output Registers (4xxxx)
04	Read Input Registers (3xxxx)
05	Force Single Coil (0xxxx)
06	Preset Single Register (4xxxx)
15	Force Multiple Coils (0xxxx)
16	Preset Multiple Registers (4xxxx)