



PG-100-104-AA Modbus RTU to SNMP Protocol Converter

PG-100-104-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-100-104-AA Gateway model supports Modbus RTU and SNMP 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 SNMP client, the PG-100-104-AA can read data from your SNMP devices and publish it as Modbus RTU data. Also, it can write commands sent from the Modbus RTU side to the SNMP devices.

When configured as a Modbus RTU client, the PG-100-104-AA can read data from your Modbus RTU devices and publish it as SNMP data. Also, it can write commands sent from the SNMP side to the Modbus RTU devices.

The PG-100-104-AA can be configured to behave as a server on both SNMP and Modbus RTU interfaces. This mode is useful when data exchange is required between a SNMP client (for eg. SCADA) and a BACnet IP client (for eg. a Building Management System).

PG-100-104-AA can be configured to behave as a client on both SNMP and Modbus RTU interfaces.

PG-100-104-AA gateways have benefitted system integrators worldwide with its powerful line of gateways. Additionally, PG-100-104-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-100-104-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	2
	RS-232	-
	Ethernet 10Base-T, 100BASE-T ²	1
	Mbus	-
	KNX	-
	LonWorks	-
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 RTU Description

PG-100-104-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)	



SNMP Protocol Driver Description

PG-100-104-AA Mode		Comments
Client		Nodes: Limited by hardware memory capacity. Each Node is specified by a unique IP address
Server		Nodes:1 As a Server the SNMP driver can act as a single Node.
Formal Driver Type		
		Ethernet
		Client (Active or Passive) or
		Server
Connection Information		
Connection Type:		Ethernet
Ethernet Speeds Supported:		10Base-T, 100Base-T ¹
Data Type Supported		
PG-100-104-AA Data Type		Description
Integer		
Octet_Stream		Character Strings
Timer_Tricks		Timer values in 1/100ths of a second
Read Operations Supported		
PG-100-104-AA As a Client		PG-100-104-AA As a Server
SNMP Get Request		SNMP Get Request
SNMP GetNext Request/SNMP Walk		SNMP GetNext Request/SNMP Walk
Write (Control) Operations Supported		
PG-100-104-AA As a Client		PG-100-104-AA As a Server
SNMP Set Request		SNMP Set Request
Unsolicited Operations Supported		
PG-100-104-AA As a Client		PG-100-104-AA As a Server
Receive Traps specified by OID Data stored by matching OID or by using OID string values to form lookup string.		Send Traps specified by OID Trap sent based on data change rules, periodic or on source data update.



Unsupported Functions and Data Types	
Data Types	Reason
Only the following SNMP Data Types are Supported: Integer Octet_Stream Timer_Tricks String	Further types will be implemented as required.
MIB-2 variables not specified above.	The PG-100-104-AA primarily being a protocol converter, these variables are not necessary.
Unsupported Devices or Protocol Options	
Protocol Versions	Details
SNMPv2, SNMPv3	Not Supported

