

PG-104-105-AC LonWorks to SNMP Protocol Converter

PG-104-105-AC 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-104-105-AC Gateway model supports LonWorks 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-104-105-AC can read data from your SNMP devices and publish it as LonWorks data. Also, it can write commands sent from the LonWorks side to the SNMP devices.

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The PG-104-105-AC can be configured to behave as a server on both SNMP and LonWorks interfaces. This mode is useful when data exchange is required between a SNMP client (for eg. SCADA) and a LonWorks client (for eg. a Building Management System).

PG-104-105-AC can be configured to behave as a client on both SNMP and LonWorks interfaces.

PG-104-105-AC gateways have benefitted system integrators worldwide with its powerful line of gateways. Additionally, PG-104-105-AC 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-104-105-AC.

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) | | | |
|-------------------|--|---|--|--|
| Environment | Relative Humidity:5-90% RH non-condensing | | | |
| | | | | |
| Power | 9-30 VDC or 12-24 VAC | | | |
| Requirements | Current Draw @ 12V about 250Ma | | | |
| | | | | |
| Physical | 4.5x2.9x1.6 in. (11.5x7.4x4.1 cm) | | | |
| Dimensions(HxWxD) | 0.4 lbs (0.2 Kg) | | | |
| | · | | | |
| | Configuration/Diagnostic utilities | | | |
| Other | Capacity: 1000 points | | | |
| | Table,Wall or DIN rail mount | | | |
| | | | | |
| | RS-485 | 1 | | |
| Communication | RS-232 | - | | |
| Interfaces | Ethernet 10Base-T, 100BASE-T ² | 1 | | |
| | Mbus | - | | |
| | KNX | - | | |
| | LonWorks | 1 | | |
| | | | | |
| 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 | | | |



LonWorks Protocol Driver Description

| PG-104-105-AC Mode | Comments | | | |
|---------------------------------|--------------|---|--|--|
| Client | Nodes: 1 T | odes: 1 The PG-104-105-AC can only represent one LonWorks | | |
| Server | Device on | the LonWorks Network. A LonWorks device is unique | | |
| | in te | in terms of its Neuron Chip Identification Number. | | |
| | | | | |
| Formal Driver Type | FieldBus | FieldBus | | |
| | Client or Se | Client or Server | | |
| | | | | |
| Connection Information: | | | | |
| Connection Type: FTT-10 Free | | e Topology Network Transceiver | | |
| Baud Rates: | | 78125 bps (bits per second) | | |
| Hardware Interface: | Built in Lon | Works FTT-10 interface | | |
| | | | | |
| Data Types Supported | | | | |
| PG-104-105-AC Data Type | Description | 1 | | |
| Integers (Long, Short, signed, | | | | |
| unsigned) | SNTVs and | SNTVs and UNTVs can be presented, stored and moved into any data type | | |
| Float | | | | |
| Byte | | uuu type | | |
| Bit | | | | |
| | | | | |
| Read Operations Supported | | | | |
| PG-104-105-AC as a Client | | PG-104-105-AC as a Server | | |
| Polled Network Variables: | | Polled Network Variables: | | |
| -Send Network Variable Fetch | | -Respond to Network Variable Fetch | | |
| -Send Network Variable Poll | | -Respond to Network Variable Poll | | |
| | | | | |
| Write (Control) Operations Supp | orted | | | |
| PG-104-105-AC as a Client | | PG-104-105-AC as a Server | | |
| Network Variables Updates: | | Network Variables Updates: | | |
| -Send Network Variable Updates | | -Accept Network Variable Updates | | |
| Unsupported Functions and Data | | | | |
| Function | Reason | | | |
| Programming messages | | PG-104-105-AC is a data transfer device, and as such, | | |
| | | programming messages are not required | | |
| Direct Memory Read/Writes | | uses the Echelon MIP which handles direct memory | | |
| under user control read and | | • | | |
| LonMark File Transfer Protocol | | does not support reading and writing remote | | |
| | | | | |



| therefore does not support the LonMark File Transfer Protocol |
|---|
| that is commonly used to access these remote files. |

SNMP Protocol Driver Description

| PG-104-105-AC Mode | Comments | | |
|--|---|---|--|
| Client | Nodes: Limite | d 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 | 10Base-T, 100Base-T ¹ | | |
| Supported: | | | |
| Data Tura Surrantad | | | |
| Data Type Supported PG-104-105-AC Data Type | Description | | |
| Integer | Description | | |
| Octet Stream | Character Strings | | |
| Timer_Tricks | Character Strings Timer values in 1/100ths of a second | | |
| | | | |
| Read Operations Supported | 1 | | |
| PG-104-105-AC As a Client | | PG-104-105-AC As a Server | |
| SNMP Get Request | | SNMP Get Request | |
| SNMP GetNext Request/SNI | MP Walk | SNMP GetNext Request/SNMP Walk | |
| | | | |
| Write (Control) Operations | Supported | | |
| PG-104-105-AC As a Client | | PG-104-105-AC As a Server | |
| SNMP Set Request | | SNMP Set Request | |
| | | | |
| Unsolicited Operations Sup | ported | | |
| PG-104-105-AC As a Client | | PG-104-105-AC As a Server | |
| Receive Traps specified by OID | | Send Traps specified by OID | |
| Data stored by matching | | Trap sent based on data change rules, periodic or on | |
| OID or by using OID string values to form | | source data update. | |
| lookup string. | | | |



| Unsupported Functions and Data Types | | | | |
|---|---|--|--|--|
| Data Types | Reason | | | |
| Only the following SNMP | | | | |
| Data Types are Supported: | Further types will be implemented as required. | | | |
| Integer | | | | |
| Octet_Stream | | | | |
| Timer_Tricks | | | | |
| String | | | | |
| MIB-2 variables not | The PG-104-105-AC primarily being a protocol converter, these | | | |
| specified above. | variables are not necessary. | | | |
| Unsupported Devices or Protocol Options | | | | |
| Protocol Versions | Details | | | |
| SNMPv2, SNMPv3 | Not Supported | | | |

ProtoConvert

