



Generic ASCII Ethernet Interface Module

PTQ-GEC

The Generic ASCII Ethernet Interface module is designed to allow Schneider Electric Quantum I/O compatible processors to interface easily with ASCII devices using the TCP/IP protocol and the Quantum processor. Compatible devices may be either ASCII instruments with Ethernet built-in or Ethernet connection via a thin server to the existing ASCII device.

Features and Benefits

Five servers and clients are present on the module permitting both the reception and transmission of data between the Quantum or Unity processor and attached devices.

The PTQ-GEC module is a powerful communication interface for Quantum platform processors. Developed under license from Schneider Electric, the module incorporates proprietary backplane technology that enables powerful data access between the module and the Quantum processor.

General Specifications

- Single Slot - Quantum backplane compatible
- The module is recognized as an Options module and has access to PLC memory for data transfer
- Configuration data is stored in non-volatile memory in the ProTalk module
- Up to six modules can be placed in a rack
- Local rack - The module must be placed in the same rack as processor
- Compatible with common Quantum / Unity programming tools
- Quantum data types supported: 3x, 4x
- High speed data transfer across backplane provides quick data update times
- Sample ladder file available

Hardware Specifications

Specification	Value
Backplane Current Load	800 mA @ 5 V
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Relative Humidity	5% to 95% (non-condensing)
Vibration	Sine vibration 4-100 Hz in each of the 3 orthogonal axes

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The use of the TCP/IP protocol with Ethernet at the device level on the plant floor is becoming widespread in many industry segments. Using the PTQ-GEC the advantage of Ethernet speed is realized while allowing greater distances between networked devices.

- Bar code scanner interfaces
- Weigh scale interfaces
- Legacy ASCII protocol connections
- Terminal port emulation
- Printer driver (alarm/status printer)

How to Contact Us: Sales and Support

All ProSoft Technology® products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

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Specification	Value
Shock	30G, 11 mSec. in each of the 3 orthogonal axes
Dimensions (HxWxD), Approx.	250 x 103.85 x 40.34 mm 9.84 x 4.09 x 1.59 in
LED Indicators	Module Status Backplane Transfer Status Serial Port Activity LED Serial Activity and Error LED Status
Debug/Configuration Port (Debug)	
CFG Port (DEBUG)	DB-9M PC Compatible RS-232 only No hardware handshaking
Application Ports	
Application Ethernet port	RJ45 Connector Link and Activity LED indicators Electrical Isolation 1500 V rms at 50 Hz to 60 Hz for 60 s, applied as specified in section 5.3.2 of IEC 60950: 1991 Ethernet Broadcast Storm Resiliency = less than or equal to 5000 [ARP] frames-per-second and less than or equal to 5 minutes duration

Functional Specifications

Functional specification for this module are as follows:

- Five servers to receive and/or transmit data
- 10/100 Base-T Ethernet-compatible interface
- Configurable parameters
 - Service port number
 - Connection timeout
 - Close type
- Simple ladder logic operation
- Setup and monitoring through Concept or Unity Pro XL software and user-constructed configuration file (GEC.CFG)
- Quantum or Unity backplane interface via I/O access
- Configuration/Debug Port (CFG)
 - Module configuration
 - Operates at 57600, no parity, 1 stop (fixed), 8 data bits
 - Communication and backplane transfer stats
 - Server statistics and configuration
 - Warm boot
 - Configuration file transfer
 - Network configuration (includes the module IP address, mask, gateway address)
- Each server monitors
 - State
 - IP and port number of connected client
 - Number of messages received and transmitted
 - Error codes

- ASCII character strings up to 2048 characters in length supported
- Full hardware handshaking control, providing radio, modem, and multi-drop support
- User-definable module memory usage, supporting the storage and transfer of up to 4000 bytes to/from the control processor
- Module error and status conditions returned to processor for diagnostic purposes
 - Module status
 - Port error status word (bit mapped)
 - Port receive state
 - Port receive character count
 - Port receive block count
 - Port transmit state
 - Port transmit character count
 - Port transmit block count
- All data related to the module is contained in a single controller tag with defined objects to simplify configuration, monitoring, and interfacing with the module
- Module configuration and communication configuration data is transferred to the PTQ-GEC via a pre-defined user data type in the processor

Additional Products

ProSoft Technology offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms. Compatible products in the ProTalk product line also include:

'C' Programmable Application Development Module with Ethernet (PTQ-ADMNET)

Visit our web site at <http://www.prosoft-technology.com> for a complete list of products.

Ordering Information

To order this product, please use the following:

PTQ-GEC Generic ASCII Ethernet Interface Module

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft distributors near you, go to <http://www.prosoft-technology.com>

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