XARTU/1™ REMOTE TERMINAL UNIT

Convenience features include:

- Pluggable terminals to streamline wiring
- Configurable as a drop-in operational replacement for many legacy RTU's
- Easily integrated into existing hardware/software systems
- Configurable as either a MODBUS® Master or MODBUS® Slave
- Supports the full compliment of Eagle Research Corporation® communications boards
- Supports most manufacturers' wired and wireless communications products
- Remotely configurable over LAN or WAN

Standard RTU Features include:

- Ruggedized Military Style (MS) Connector for RS232 laptop communication and data gathering when required
- Software programmable to handle most measurement, control, data gathering and alarm functions

Enclosure Options:

- Industrial Panel Rack Mount Enclosure
- Wall/Panel Mount Enclosure

Keypad & Display Options:

- Weatherproof External Keypad
- Internal Keypad and Display
- Multi Line Alphanumeric Display
- Historical Trending Display
- Optional Back-Lit Display

Expansion Capability: Additional connectors provide redundant termination points to allow for configuration flexibility. Two 10-position connectors allow for expansion over the I²C communication bus. Optional isolated analog output modules, optional serial ports (RS-232/485), and optional Remote I/O (RIO) Boards available for more expansion capabilities.

EAGLE RESEARCH® CORPORATION

Technical Specifications:

- Input Power: 7-30 VDC. Two battery inputs with MTA connectors. One power supply/rechargeable battery input with screw terminals. One Solar power input with screw terminals. (10 Watt Maximum Panel Size)

- Power Monitoring: Supply voltage monitoring through A/D with low supply voltage alarming

- Backup Battery: 3.6 VDC lithium backup battery of database, history, audit trail, time/date, RAM memory.

- Memory: Store up to 32,000 Time Stamped Records with programmable FLASH program memory and battery-backed RAM data memory

- Communications: Available On-Board Dial-up Modem port with extension off-hook detection. Two RS-232 ports with RX, TX, RTS, CTS, and communication switch signals. Up to 4 Expansion Comm Ports (RS-232/485). Configurable speed up to 115,200 baud. Directly interfaces to Cell Modems (TCP/IP), Radios, Satellite, etc. Communication protocols selectable on a per port basis: Eagle HexASCII or Modbus

- Flow Meter support: AGA7 - Turbine Meter/ Rotary/PD, UM with AGA9, Coriolis with AGA11

- Supercompressibility: NX19, AGA8 (Gross Method I, Gross Method II and Detailed Methods)

Inputs / Outputs (I/O) Available:

- Internal Inputs: One ambient temperature input; one supply voltage input

- Pulse Inputs: Four pulse inputs, software programmable for Form A or C; high or low speed. Each counter is a six-digit (0-999999) hardware counter with programmable interrupt support. Can be used for simple pulse accumulation, and for more complex applications such as card readers.

- Digital I/Os: Five multi-purpose, memory-mapped digital I/O lines. High-level functionality including pulse inputs, PWM (pulse width modulation) outputs, and complex custom inputs/outputs. Two I/O lines are connected to field terminals through standard OPTO modules. The other 3 I/O lines can be used as either Form C or A relay outputs (solid state 100 mA max AC/DC) or status inputs (50 V max. DC only).

- Analog Inputs: Six general-purpose analog inputs, 12 bit resolution (16 bit available), analog sampling, software calibration. Nominal input ranges 0-5VDC or a 250 ohm resistor in socket allows for 4-20 mA input for each channel. Each input has 3 screw terminals (Supply, Signal, and Ground). Reference Accuracy 0.07% of span

- RTD Inputs: Two 12-bit resolution RTD inputs; 3-wire lead resistance compensated with ground shield connection; four screw terminals per input.   Reference Accuracy 0.08% of span

Field to Front Office Solutions™