

XARTU/1™ Remote Terminal Unit

Distributed By



Meter, Valve & Control
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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 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:

- Hoffmann Enclosure
- 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



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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, Modbus, Teledyne/Geotech, or Valmet.
- **Warranty:** Four Years on all Eagle Research manufactured components

Transmitters/Sensors Accuracy Specifications:

- **Pressure Transducer:** Accuracy: +/- 0.25% of full scale. Higher Accuracy transducers available upon request. Available Ranges: 0-1 PSIG, 0-5 PSIG, 0-10 PSIG, 0-25 PSIG, 0-50 PSIG, 0-100 PSIG, 0-200 PSIG, 0-300 PSIG, 0-500 PSIG, 0-1000 PSIG, 0-1500 PSIG, other ranges available upon request.
- **Temperature Probe:** Accuracy: +/- 1°F, 100 ohm platinum RTD. Range: -40°F - 160°F.

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).
- **RTD Inputs:** Two 12-bit resolution RTD inputs; 3-wire lead compensated with ground shield connection; four screw terminals per input.
- **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.