

## AUTOMATION, CONTROL, AND MONITORING

REMOTE POWER

### ELECTRICAL REQUIREMENTS

- 0.50A @ 24 Vdc nominal
- 0.25A @ 48 Vdc nominal
- 0.100A @ 120 VAC (external adapter required)

### POINT COUNT

- 24 Digital Input • 24 Analog Input
- 24 Digital Output

### INPUT POWER OPTION

- 24 Vdc • 48 Vdc • 120 VAC

### POWER SUPPLY

- 5 Vdc: adjustable from the front
- Power on/off switch on front enclosure
- LED Indication for +5V, +15V, -15V
- 12 W consumption
- Test Points on front panel for +5, +15, -15

### ANALOG SPECIFICATION

#### Accuracy:

- ±10 V: ± .133% ±27 ppm/deg. C
- ±20 V: ± .333% ±77 ppm/deg. C
- ±60 V: ± .333% ±77 ppm/deg. C

#### Input Ranges:

- ± 10 V • ± 20 V • ± 60 V

### DIGITAL I/O

- Output: 0.5A in the ON state
- 300 Vdc in the OFF state
- Optically isolated

#### Input Range:

- Voltage Keyed
- +5 Vdc Trigger Level
- +1.4 Vdc Trigger Level
- 3.5 Vdc Trigger Level
- Dry Contact

### FIELD WIRING

- Interface Cables: 50 Pin (25 pair) connectors mounted to steel back panel with holding screws that resist the effects of shock and vibration.

### ENVIRONMENTAL DATA

- Operational Temp: 0 to 50 deg. C
- Storage Temp: -40 to 70 deg. C
- Humidity: 95% Noncondensing

### MECHANICAL DATA

- Rack Mount: 19" Width: 17.2"
- Height: 1.719" Depth: 12.5"
- Weight: 11.5 lbs

The Tetragenics MiniMote-6 Monitoring and Control Remote Terminal Unit (RTU) gives you the functions of a full size RTU in a unit only 1.75" high (one 19" rack unit). It's one of our smallest and most powerful RTUs. On a single PC board the MiniMote-6 contains a high speed processor, 24 points of digital input, 24 points of analog input, 24 points of digital output, and 6 RS-232 serial ports (2 of the ports can be configured for RS-422/485).

The MiniMote-6 offers speed and versatile communications ports. **It allows your system to communicate with other-vendor equipment with different protocols (like TBOS\*).** The MiniMote-6 RTU is available in 24 Vdc, 48 Vdc, or 120 VAC options (the 120 VAC option includes an external transformer).



MiniMote-6 RTU

### Processing Features

- 20 MHZ, 32 bit 68332 processor
- 68882, 32 bit floating point coprocessor
- Watchdog timer for qualification of digital outputs
- Digital input scanning via hardware logic — interrupts when a digital input change is detected
- LED indication for Reset, watchdog timer, and memory access
- 1 Mbyte RAM and 1 Mbyte of FLASH/EPROM
- 6 EIA RS-232 serial ports (one for host communications, one for local diagnostics). Alternately, 3 RS-232 and 2 RS-422/485 ports
- A daisy chain port is supplied for multiple RTUs at one site
- Supports multiple protocols to communicate to other-vendor equipment

### Digital Input Features

- 24 voltage keyed (± 60 Vdc max.) or dry contact digital input circuits
- Jumper-selectable trigger levels on voltage keyed inputs (points can be set at - 3.5, 1.4, or 5 volts)
- Interrupts CPU when any digital input changes state

### Analog Input Features

- 24 single ended analog input signals per board
- Each input is independently selected for voltage input range
- Approximately 2 millisecond conversion time
- Interrupts CPU board at completion of analog-to-digital conversion
- Input voltage range options: ± 10 volts, ±20 volts, ± 60 volts
- 12-bit analog-to-digital (A/D) resolution

### Digital Output Features

- 24 optically isolated MOSFET outputs
- Each output is an independent solid state switch
- Each switch can pass 0.50 amps in the ON state
- Each switch can withstand 300 Vdc in the OFF state

\*TBOS: Telemetry Byte Oriented Serial

