

SPECIFICATIONS

INPUT

System Capacity

- 16, 32, 48 inputs per unit
- 3,072 inputs per SER system

Field Contacts

- Normally Open (N.O.) or Normally Closed (N.C.)
- Wetted (voltage supplied) or dry (voltage free) contacts

Field Contact Voltage Range

- 20-150 VDC (auto-select)

Input Isolation

- Each input is optically isolated

Input Response

- 1 millisecond to 60 seconds

Responds to alarms as quick as 1 msec or alarms lasting up to 60 seconds

Contact De-Bounce

- 0-60 seconds

Can ignore multiple alarms occurring within 0-60 seconds from initial alarm

Delete From Scan

Automatic Mode

- Adjustable from 0-255 events per minute. Automatically resets itself

Manual Mode

- Disable any input manually

ALARM LEGENDS

- 32 character alarm legend
- 32 character normal legend

LED INDICATORS

Alarm Status

- Red LED per input
- Flash upon alarm, steady ON after acknowledged via WEB browser

Power, Status, Time Sync

- Green LED for "Normal"
- Red LED for "Abnormal"

OUTPUTS

Alarm Relays

- 2 form C (SPDT) relays, configurable via WEB browser for:
 - Common alarm (closes on any alarm)
 - Reflash alarm (pulses upon new alarm)
 - Horn Output
 - System watchdog
- Energized or de-energized operation

Relay Ratings

- 24 VDC @ 2.0 amps
- 110 VDC @ 0.2 amps
- 120 VAC @ 2.0 amps

TIME STAMPED ALARMS

- 1 msec time stamp resolution
- 40,000 event storage (per unit)

TIME SYNCHRONIZATION

- IRIG-B time sync input (modulated or de-modulated) accurate to +/- 1 msec Real Time
- NTP time sync (via Ethernet) (can sync 1-3 IP addressed sources) accuracy based on location of NTP time servers
- Internal Crystal
- Master unit can synchronize up to 24 "Slave" units via RS485 (max 4,000 feet)

COMMUNICATIONS

Serial Port

- Rs-232/485 selectable
- Modbus RTU, DNP 3.0, serial ASCII

Ethernet Port 10/100

- DHCP or Fixed IP
- Modbus TCP/IP, DNP 3.0, BACNET, SNMP

WEB Server

- Multi-user support
- Used for configuration of unit
- Graphical and text display of alarms
- Can combine up to 25 units on a single WEB browser (1,200 alarms)
- Acknowledgement of alarms
- Separate screens for active alarms and archived event log
- Email notification
- Export to CSV, COMTRADE
- Printing of alarms (auto/manual)
- Multiple levels of security
- HTTPS encrypted username/password

CONNECTIONS

Input / Output Terminals

- Removable barrier terminal block
- Maximum 12 GA (2.5mm)

MECHANICAL

Surface Mounting

- Din rail / panel
- 17.8"(452) x 6.8"(172) x 2.3"(58)

19" Rack Mounting

- 1U
- 6.8" (172) Depth
- 1U; 6.8" (172) Depth

ISM Retrofits

- Input Card Rack, Panel and Shelf

POWER REQUIREMENTS

Built-in Power Supplies:

24 VDC Power Supply

- 24 VDC (19-29 VDC)
- Maximum 24 watts

AC/DC Power Supply

- 85-300 VAC 50,60 Hz
- 100-300 VDC

Can use 1 supply above or 2 for redundancy/dual power applications

- Hot swappable
- Internal 24 VDC Field Contact Voltage supply
- Maximum 24 watts

External Power Supplies:

System Power Supply

- Input: 48 VDC (36-72 VDC)

- Output: 24 VDC (requires internal 24 VDC Power Supply above)

125 VDC Field Contact Voltage Supply:

- Input: 90-265 VAC or 110-350 VDC

- Output: 125 VDC

ENVIRONMENTAL

Operating Temperature Range:

- -4 to 140°F (-20 to 60°C)

Humidity:

- 20-95% RH

Surge Withstand:

- ANSI C37.90.1:2002

Fast Transient:

- IEC-61000-4-4

Surge Immunity:

- IEC-61000-4-5

EMI/RFI/ESD:

- IEC-61000-4-2, 4-3, 4-6, 4-8
- Emissions: CISPR 11, Class A

Isolation:

- 2000 VDC Power to Earth
- 3150 VDC Power to Inputs

Power Quality:

- IEC 61000-3-2 harmonic current
- IEC 61000-3-3 flicker low voltage
- EN 61000-4-11 voltage variation

CERTIFICATIONS

UL, ULCC, CE