suitelifesystems™

General Purpose IO

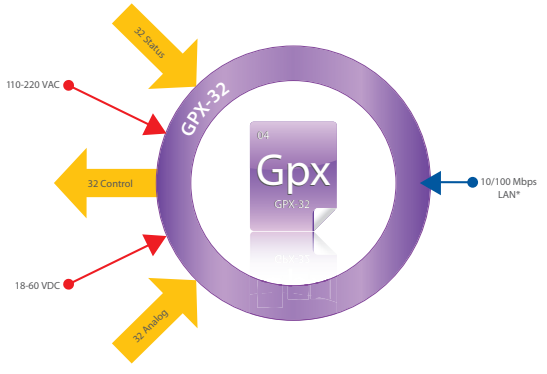
GPX-32™ and *PDP*™

The *GPX-32*™ Universal Interface gives you the cost-effective input flexibility you need to connect to a wide range of parallel world devices.

Versatile and Rack-Mountable

The ***GPX-32*** is a universal interface designed to support 32 parallel channels of analog, status (via opto-isolated) and control (via relay contacts) per unit. The ***GPX-32*** translates the General Purpose Input and Output ("GPI/GPO") channels into TCP/Ethernet data streams for processing by the ***Axess*** software. Any number of ***GPX-32*** units can be deployed with a single ***Axess*** system allowing for almost unlimited GPIO expandability. As the ***GPX-32*** is connected via Ethernet it can be installed either locally or remotely to the host ***Axess*** system for flexible deployment. The ***GPX-32*** is a "passive" device, which means it simply relays information from devices (e.g., temperature sensors, door alarms and light switches). The ***GPX-32*** includes built-in temperature/humidity, mains and DC voltage monitoring with both 110/240AC and 20-60VDC operation possible.

Front and Rear view *GPX-32*



Punch Down Panel Interface

The ***PDP*** or Punch Down Panel, is used to facilitate connection of passive peripheral equipment to the ***GPX-32*** interface. The unit is comprised of 4 cables, 2 x SCSI 50pin and 2 x SCSI 68pin, which interconnect between the ***GPX-32*** and the wiring interface. The ***PDP*** has PCB mounted 110 blocks, SCSI connectors and jumpers. The PCB is mounted on a 2RU metal frame to allow for easy mounting in a standard 19" EIA rack.

Front and Rear view *PDP*

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Technical Specifications

GPX-32, Technical Specifications

Power Supply

110-220VAC, 50/60Hz via standard IEC plug

Power Supply Specifications

- Input Voltage: 100 ~ 240VAC
- Input Frequency: 47 ~ 63Hz
- Input Current: 0.8A ~ 0.5A

+/-48VDC input (external battery or solar array) in the event of conventional power failure. Input via 2 position Molex connector.

DC to DC Converter Specifications

- Input Voltage: 20VDC - 60VDC
- 1500V isolation
- Mating Connector: Molex Part No. 39-01-2020
- Crimp Pin: Molex Part No. 39-00-0039 #18-24AWG

Operating Temperature

-30°C to +45°C (-22°F to 133°F)

Humidity

10% to 90% RH (non-condensing)

Mechanical Dimensions

19"W X 1.75"H (1U) X 10.5"D, Standard EIA Rack Mounting

Onboard Temperature Sensor

Operating Range: -30°C to +80°C

Onboard Humidity Sensor

10% to 95% RH

Onboard Voltage Monitoring

AC Mains Voltage
DC Bus Voltage

Status Indication

Data – Illuminates with the arrival of incoming host data.
Error – CRC Communication Error or any general error condition.
Power – DC Bus Power Good.

Network Interface

Ethernet 10Base-T or 100Base-TX (Auto-Sensing)
Connector – RJ45
Indicators (LED)

- 10Base-T/100Base-TX connection
- Link and activity indicator – Full/half duplex

Digital I/O

Opto-Isolated Inputs

- Number of Inputs: 32 Total
- I/O Connector: 0.050" 68 Pin SCSI Connector
- Input Voltage Range: +5VDC to +30VDC Non-Polarized Anode and Cathode available on isolated pins

Analog Inputs

- Number of Inputs: 32 Balanced Differential
- I/O Connector: 0.050" 68 Pin SCSI Connector
- Input Voltage Range: +/-5VDC and +/-15VDC, selectable in 4 banks of 8=
- Input Modes:

1. Differential – Both AIN+ and AIN- inputs driven within voltage range however neither signal falls below a common or ground reference. The difference in the 2 signals is amplified across the full scale input of the ADC.
2. Bipolar – AIN+ input driven within voltage range above and below AIN- while it is held at fixed reference. The signal is amplified across the full scale input of the ADC.
3. Unipolar – AIN+ input driven within voltage range while AIN- is held at a fixed reference. The signal is amplified across ½ full scale of the ADC.

- Input Impedance: Minimum 100K
- ADC: 16 bit, 200Ksps, +/-2LSB INL, accurate to within +/-5% of input voltage

Relay Outputs

- Number of Outputs: 32 Total
- I/O Connector: 2 X 0.050" 50 Pin SCSI Connector
- Contact Rating: 1A @ 30VDC
- Maximum Switching Power: 30W
- Maximum Switching Voltage: 60VDC
- Maximum Switching Current: 1A

PDP, Technical Specifications

Mechanical Dimensions

19"W X 3.5"H (2U) X 3.5"D, Standard EIA Rack Mounting

Connectors

2 x 0.050" 68 Pin SCSI Connector
2 x 0.050" 50 Pin SCSI Connector

Wire Specification

Solid Wire: 26 AWG
Stranded Wire: 24 AWG

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