

# SMU - 16DI



## SMU-16DI

Downtime on equipment is something none of us want. Having visibility over your equipment's operating status gives you the power to make sound, informed, and timely decisions to optimize your operations. AMCi-Wireless can help by giving you the information you need to make these decisions and minimize or even prevent downtime in your operations. The 16DI gives you important information and alerts you to critical conditions, in many cases giving you the opportunity to respond prior to a failure.



## KEY FEATURES

- Two-way satellite communication
- Built-in GPS receiver and antenna
- Simple integration with I/O board and terminal blocks
- Expandable I/O channels - configure as digital I/O or as analog input
- AMCi-Wireless SatAlarm®-Server
- 24/7 technical support, call center, and asset administration
- First-fault monitoring
- Polycarbonate NEMA-4x/6P lockable enclosure
- Integrated antennas (no coax); no external antennas
- Self-contained, solar-powered
- 36 month warranty



## PRODUCT BENEFITS

- Provides insight into remote operations
- Gap-free coverage
- GPS for precise location information
- Scheduled, event-based, and on-demand reporting
- Programmable over the air - reducing the need to send personnel into the field
- Flexibility to communicate with many sensors and controllers
- Low power consumption for applications that require long battery life
- 24/7 technical support

## SatAlarm® Server Web-Based SCADA

- Web browser based historian
- Color graphical interface
- User configurable displays
- Customizable dashboard
- Multi data point graphs
- Data tracking
- Integrated Maps
- Equipment configuration
- Device control
- Data conditioning
- Reporting

## EXTERNAL INTERFACES

- Serial: 2 ports; RS-232 and RS-485
- I/O: 4 channel; individually configurable as analog input or digital input/output
  - o Analog inputs: 0 – 3.0V, 1.0mV (12-bit) resolution; 4-20mA, 143 Ω loop resistor
  - o Digital inputs: -10 – 150VDC safe, pull-up or pull-down
  - o Digital outputs: 32VDC safe, 250mA sinking (open drain), or 3VDC, 25µA (push-pull)
- Additional I/O available using Modbus I/O expansion modules

## PROGRAMMING

- Reporting (configured over the air):
  - o Configurable time-of-day based schedule
  - o Configurable interval-based schedule
  - o 3 minutes up to once every 3 days
  - o By exception; user definable test conditions
- Modbus RTU:
  - o 16 configurable commands
  - o Data reportable by schedule, interval, threshold test, any change, or pattern match

## GPS

- Acquisition Time: 27 seconds (warm & cold)
- Accuracy: 2.5 meters (CEP-Horizontal)
- Sensitivity:
  - o Acquisition: -147 dBm
  - o Tracking: -159 dBm

## SATELLITE MESSAGING

- Two-way, global, IsatData Pro
- From terminal (max per message) - 6400 bytes
- To terminal (max per message) - 10,000 bytes

## SATELLITE COMMUNICATION

- Frequency:
  - o From terminal: 1626.6 – 1660.5 MHz
  - o To terminal: 1525 – 1559 MHz
- Elevation Angle: 20° to 90° for communications link
- Maximum EIRP: 7.0 dBW
- Maximum Antenna Gain: 4.5 dBic

## POWER

- Solar Power: 12VDC, 10W, 7Ah

## CERTIFICATIONS/COMPLIANCE

- Satellite - Inmarsat
- Other - C-Tick, CE, FCC, IC, Anatel, RoHS(?)

## ENVIRONMENTAL

- Operating Temperature: -20°C to +50°C
- Storage Temperature: -40°C to +85°C
- Humidity: 90%RH @ 85°C; meets SAE J1455
- Dust and Water Ingress: IP66/Nema-6P (with door screws installed)

## ENCLOSURE

- Polycarbonate
- Nema-4x/6P (with door screws installed)
- 1x ½-inch pass-thru cord grip
- Lockable

## PHYSICAL

- 5.0 x 5.0 x 1.9 in. (12.6 x 12.6 x 4.9 cm)
- 1.0 lbs. (0.46 kg)

## WARRANTY

- 3 year standard limited warranty

*Disclaimer AMCi warranties 16 DI hardware for a full three years (36 months) \* \* Warranty is subject to AMCi published Terms and conditions. Contact your AMCi representative to obtain a copy or visit [www.amci-wireless.com](http://www.amci-wireless.com)*



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