ST-9100

AMCi WIRELESS

DUAL MODEM

ST-9100

The ST9100 is a versatile, programmable, dual-mode terminal supporting simultaneous satellite and cellular connections. Cost effectively monitor and control remote assets with multi-network connectivity. This platform is ideal for remotely monitoring and controlling fixed and portable assets.

*Disclaimer AMCi warranties ST9100 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*

KEY FEATURES

Two-Way Dual Mode Satellite-Cellular Communication

Edge Computing, Scheduled, Event-Based, and On-Demand Reporting

Built-In GPS Receiver and Antenna

Expandable I/O Channels Configurable as Digital I/Os or Analog Inputs

Output Channels

RS485 and RS232 Modbus-RTU Serial Ports

Multi Carrier Support

First-Fault Monitoring

Internal Rechargeable Backup Battery

36 Month Warranty

PRODUCT BENEFITS

Wireless1440 iPhone and Android Apps

AMCi-Wireless SatAlarm®-Server

Insight into Remote Operations

Gap-Free Coverage

GPS for Precise Location Information

Programmable Over The Air (OTA)

Flexibility to Communicate with many Sensors and Controllers

Low Power Consumption for Applications that require Long Battery Life

24/7 Technical Support, Call center, and Asset Administration

SatAlarm® Server Web-Based SCADA

· Web browser & App 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)
· Inputs: 4 channel; individually configurable as analog input or digital input
o Analog inputs: 0 – 5.0V, 1.0mV (12-bit) resolution
o Digital inputs: -10 – 150VDC safe, pull-down
· Outputs: 2 channel
o Digital outputs: 32VDC safe, 250mA sinking (open drain)
· 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 1 minute up to once every 28 days
o By exception; user definable test conditions
· Modbus RTU:
o16 configurable commands
o Data reportable by schedule, interval, threshold test, any change, or pattern match

GPS

· Acquisition Time: 1-27 seconds (warm & cold)
· Accuracy: 2.5 meters (CEP-Horizontal)

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° (remote antenna) -15° to +90° (low elevation antenna)
· Maximum EIRP: 7.0 dBW
· Maximum Antenna Gain: 4.5 dBic

CELLULAR COMMUNICATION

· Global: Cat 4 LTE (B1, B3, B5, B7, B8, B28), UMTS (850, 900, 1900, 2100), Quad-band GSM
· Americas: Cat 1 LTE (B2, B4, B5, B12), UMTS (850, 900, 1900, 2100), Quad-band GSM
· Saudi Arabia: Cat 1 LTE (B1, B3, B8, B20, B28), UMTS (2100)
· SIM: 3.3V/1.8V SIM

POWER

· Input voltage: 9 to 32VDC
· Load dump protection : +150V; SAE J1455

CERTIFICATIONS/COMPLIANCE

· CE (R&TTE, RoHS 2), FCC/IC, PTCRB, Inmarsat type approval, ACMA, ICASA, Anatel, ITF, IEC 60945

ENVIRONMENTAL

· Operating temperature: transceiver and antenna: -40°C to +85°C; back-up battery: -20°C to +75°C;
· Dust and water ingress: transceiver: IP67; Satellite/GPS antenna: IP67;
· Vibration: SAE J1455 (Sec 4.9.4.2 fig 6-8); MIL-STD-810G
· Shock: MIL-STD-810G (Sec 516.6)

INTERNAL BATTERY

· Lithium ion 2,000 mAh
· Discharge temperature range: -20°C to +75°C

PHYSICAL

· 148 x 113 x 47 mm
· 181 x 113 x 47 mm including mounting feet
· 13.9 lbs. (6.3 kg)

WARRANTY

· 3 year standard limited warranty

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