

IRIDIUM™ SATELLITE MODEM: MODEL A3LA-X



- ✓ Similar to a standard land-line modem—serial interface and AT commands
- ✓ Configured for either the DoD or commercial gateway
- ✓ Supports dial-up, RUDICS, SBD, SMS, direct Internet and voice
- ✓ Real-time, continuous circuit-switch communications
- ✓ Two-way communications in all data modes
- ✓ Pole-to-pole global coverage
- ✓ Certified to MIL-STD-810F
- ✓ Wide range of DC input voltage
- ✓ Easy to install

IRIDIUM™ SATELLITE MODEM: MODEL A3LA-X

The A3LA-X is a satellite modem designed to operate with the Iridium network. Similar to a standard land-line modem, the A3LA-X can be controlled by any DTE (data terminal equipment) capable of sending AT commands via a serial port. A DTE can be a desktop computer, a laptop computer, a PDA, or even a micro-controller. It has been certified to MIL-STD-810F standards for temperature, humidity, altitude, rain, shock, sand, dust and salt fog.

Model A3LA-X Specifications

Mechanical

Dimensions:	162 mm x 67 mm x 27 mm (6.38" x 2.65" x 1.06")
Weight	340 g (0.75 pound)
I/O Interface:	25-Pin D-Sub, SIM Reader
Status Display:	Two LEDs
Antenna:	TNC Female
Cooling:	Convection
Enclosure:	Aluminum/EMI shielding

Electrical

Input Voltage Range:	4.0VDC to 32.0VDC
Input Nominal Voltage:	12.0VDC
Input Ripple Voltage:	40mV peak-to-peak
Avg. Standby Current:	300mA @ 5.0VDC
Avg. Data Call Current:	800mA @ 5.0VDC
Peak Data Call Current:	2.5A @ 5.0VDC

A3LA-X SATELLITE MODEM
POWERED by the IRIDIUM



IRIDIUM™ SATELLITE MODEM: MODEL A3LA-X



- ✓ Operates similar to a standard modem
- ✓ Wide range of DC input voltage
- ✓ Supports all Iridium data modes and voice
- ✓ Can be configured for either the DoD or commercial gateway
- ✓ Certified to MIL-STD-810F standards
- ✓ Two-way, real-time communications
- ✓ Truly global coverage

Model A3LA-X Specifications

Iridium RF Board

Operating Frequency: 1616 to 1626.5 MHz
Duplexing Method: Time Domain Duplex
Multiplexing Method: TDMA/FDMA
Link Margin: 13.1 dB
Avg. Power During a Transmit Slot: 7W
Avg. Power During a Frame: 0.6W
Receiver Sensitivity at 50Ω: -118.5 dBm
Receiver Spurious Rejection: 60 dB

Data I/O

Dial-up Data, RUDICS: 2.4 Kbits/sec
Direct Internet: 2.4 Kbits/sec (~10.0 Kbits/sec with Apollo Emulator under the DoD gateway)
Short-Burst Data: 1960 Bytes/Message outbound, 1850 Bytes/Message inbound
Short Messaging: 160 characters
Hardware Interface: RS-232
Software Interface: AT Commands

Environmental

Operating Temperature: -30°C to +70°C (-22°F to +158°F)
Operating Humidity: < 75% RH
Storage Temperature: -40°C to +85°C (-40°F to +185°F)
Storage Humidity: < 93% RH
Certified to MIL-STD-810F standards for temperature, humidity, altitude, rain, shock, sand, dust, salt and fog