

Iridium Satellite Modem Model A3LA-D

General Description

Model A3LA-D is a satellite modem designed to operate with the Iridium network. Similar to a standard land-line modem, the A3LA-D can be controlled by any DTE (data terminal equipment) capable of sending standard AT commands via a serial port. A DTE can be a desktop computer, a laptop computer, a PDA, or even a micro-controller.



Specifications

Mechanical

Dimensions:	7.73" L x 3.25" W x 1.54" D (19.6 cm x 8.3 cm x 4.0 cm)
Weight:	~1.44 pounds (659 g)
I/O Interface:	25-Pin D-Sub, SIM Reader
Antenna:	TNC Female
Cooling:	Convection
Enclosure:	Aluminum/EMI shielding

Electrical

Input Voltage Range:	4.0VDC to 4.8VDC
Input Nominal Voltage:	4.4VDC
Input Ripple Voltage:	40mV pp
Avg. Standby Current:	130mA @4.4VDC
Avg. Transmit Current:	1.0A @ 4.4VDC
Avg. Data Call Current:	500mA @ 4.4VDC
Peak Power-up Current:	~2.2A @ 4.4VDC

RF

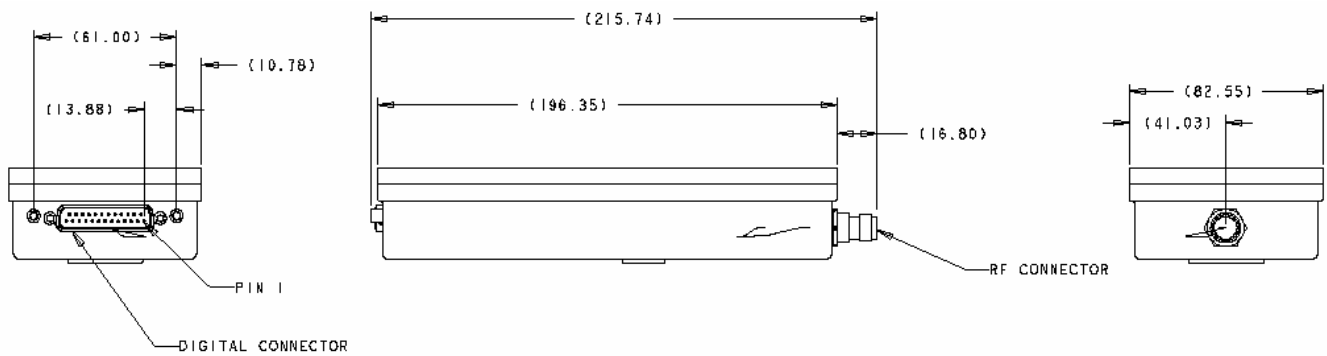
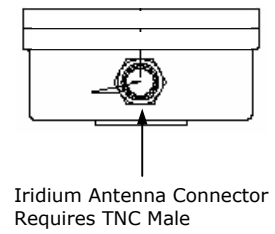
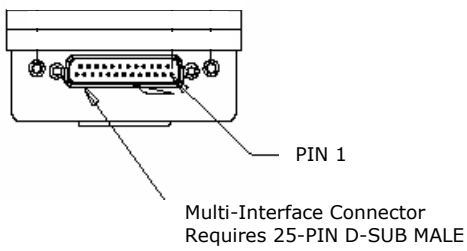
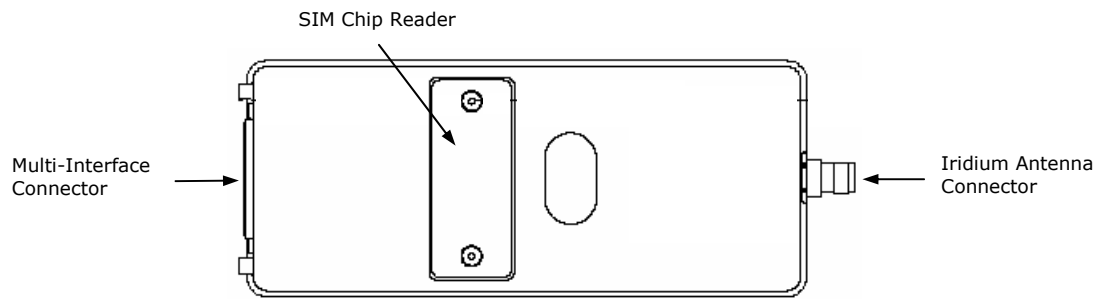
Operating Frequency:	1616 to 1626.5 MHz
Duplexing Method:	Time Division Duplex
Multiplexing Method:	TDMA/FDMA
Link Margin:	13.1 dB

Data I/O

Dial-up Data, RUDICS:	2.4 Kbits/sec
Direct Internet:	~10.0 Kbits/sec
Short-Burst Data:	1960 Bytes/message
Short Messaging:	160 characters
Hardware Interface:	RS232
Software Interface:	AT Commands

Environmental

Operating Temperature:	-4°F to +140°F (-20°C to +60°C)
Operating Humidity:	< 75% RH
Storage Temperature:	-40°F to +185°F (-40°C to +85°C)
Storage Humidity:	< 93% RH



* All dimensions are in mm