

Iridium Satellite Transceiver Model 9603-I

General Description

The 9603-I is a satellite transceiver designed to operate with the Iridium network in SBD-only mode. It is intended to be used as a daughterboard fitted on another host system motherboard. The 9603-I communicates with a host system through serial interface at 3.3V digital signal levels.

NAL Research can enable the 9603-I to utilize either the Iridium commercial gateway at Tempe, Arizona or the U.S. DoD EMSS Gateway when requested by an authorized user.



Specifications

Mechanical

Dimensions:	1.24" L x 1.17" W x 0.32" D (31.5 mm x 29.6 mm x 8.1 mm)
Weight:	0.40 oz (11.4 g)
I/O Interface:	Samtec ST4-10-2.5-L-D
Antenna:	U.FL
Cooling:	Convection
Enclosure:	EMI shielding

Electrical

Input Voltage Range:	4.8VDC to 5.2VDC
Input Nominal Voltage:	5.0VDC
Input Ripple Voltage:	40mV pp
Avg. Standby Current:	45mA @ 5.0VDC
Avg. Transmit Current:	190mA @ 5.0VDC
Peak Current:	1.5A @ 5.0VDC

RF

Operating Frequency:	1616 to 1626.5 MHz
Duplexing Method:	Time Division Duplex
Link Margin Downlink:	13 dB average
Link Margin Uplink:	7 dB average

Data I/O

SBD Mobile Originated:	340 Bytes/message
SBD Mobile Terminated:	270 Bytes/message
Hardware Interface:	3.3V Digital
Software Interface:	AT Commands

Environmental

Operating Temperature:	-22°F to +158°F (-30°C to +70°C)
Operating Humidity:	< 75% RH
Storage Temperature:	-40°F to +185°F (-40°C to +85°C)
Storage Humidity:	< 93% RH