9603

The Iridium 9603 is the world's smallest commercially available two-way transceiver. The 9603 makes use of a SIM-less design for the highly reliable SBD packet data service. It is designed for innovative applications where weight and size are the primary requirements and communication is critical. The 9603 is intended to be integrated into wireless data applications with other host system's hardware and software to produce a complete telemetry solution.

Mechanical

Dimensions:	31.5mm x 29.6mm x 8.1mm
Weight:	11.4g
Operating Temp:	-40C to +85C

Data I/O

MO Message Size:	340 bytes/message
MT Message Size:	270 bytes/message

Electrical

Input Voltage:	5.0V +/- .5V DC
Radio Frequencies:	1616 to 1626MHz

9602

The Iridium 9602 transceiver leverages Iridium's low-latency SBD service and provides truly global coverage. The 9602 is designed to be integrated into wireless data applications with other host system's hardware and software to produce a complete telemetry solution. The 9602 meets the regulatory requirements for FCC, Canada and CE assuming an antenna with a gain of ~3 dBi and adequate shielding is used.

Mechanical

Dimensions:	41.0mm x 45.0mm x 13.0mm
Weight:	31.0g
Operating Temp:	-40C to +85C

Data I/O

MO Message Size:	340 bytes/message
MT Message Size:	270 bytes/message

Electrical

Input Voltage:	5.0V +/- .5V DC
Radio Frequencies:	1616 to 1626MHz

9523

The Iridium Core 9523 transceiver module is Iridium's smallest and lightest voice and data satellite transceiver module ever. Over 90% more compact than the 9522B module, it features standardized connectors, making integration into innovative new devices and solutions easier than ever. With simplified PCB integration and compact form factor, designers can mount the 9523 directly onto their application board – enabling optimization through shared components and power sources.

Mechanical

Dimensions:	70.4mm x 36.04mm x 14.6mm/8.9mm
Weight:	32.0g
Operating Temp:	-30C to +70C

Data I/O

MO Message Size:	1960 bytes/message
MT Message Size:	1890 bytes/message
Interfaces:	Iridium Voice/ Iridium Push-to-Talk/ Circuit Switched Data (CSD)/ SMS/ LBS/ SBD

Electrical

Input Voltage:	+3.2V to +6V
Radio Frequencies:	1616 to 1626MHz

Iridium Core Tranceivers

Powering Solutions for Global Telemetry Challenges

Specifications listed above reflects the current available information for the 9603N and 9602F Iridium transceivers

Printed June 2015

iridium | JouBeh

Technical Specifications

	Iridium 9603 Transceiver	Iridium 9602 Transceiver	Iridium 9523 Transceiver	
MECHANICAL				
Dimensions:	31.5mm x 29.6mm x 8.1mm	41.0mm x 45.0mm x 13.0mm	70.4mm x 36.04mm x 14.6mm/8.9mm	
Weight:	11.4g	31.0g	32.0g	
RADIO FREQUENCIES				
Operating Frequency	1616 to 1626.5MHz	1616 to 1626.5MHz	1616 to 1626.5MHz	
Duplexing Method	Time Division Duplex	Time Division Duplex	Time Division Duplex	
Input/Output Impedance	50Ω	50Ω	50Ω	
Multiplexing Method	TDMA/FDMA	TDMA/FDMA	TDMA/FDMA	
ENVIRONMENTAL				
Operating Temperature	-40C to +85C	-40C to +85C	-40C to +85C	
Operating Humidity	< 75% RH	< 75% RH	< 75% RH	
Storage Temp	-40C to +85C	-40C to +85C	-40C to +85C	
Storage Humidity	< 93% RH	< 93% RH	< 93% RH	
DATA I/O				
MO Message Size	340 Bytes/message	340 Bytes/message	1960 Bytes/message	
MT Message Size	270 Bytes/message	270 Bytes/message	1890 Bytes/message	
POWER			VBAT Power Input Specs	
Supply Input Voltage Range	5.0V +/- .5V DC	5.0V +/- .5V DC	Voltage Limits	+3.2V to +6V
Supply Input Voltage Ripple	< 40mV pp	< 40mV pp	Maximal Current	500mA
Idle Current Avg	34mA	45mA	**VBOOST Typical Current at +3.7V**	
Idle Current Peak	156mA	195mA	Standby Current	70mA
Transmit Current Avg.	145mA	190mA	Peak Current During Call	300mA
Transmit Current Peak	1.3A	1.5A	Average Current During Call	110mA
Receive Current Avg.	39mA	45mA	**VBOOST Power Input**	
Receive Current Peak	156mA	195mA	Nominal Voltage	+27V
SBD Message Transfer Avg. Current	158mA	190mA	Maximal Current	1A
SBD Message Transfer Avg. Power	< =0.8W	< =1.0W	**VBOOST Power Consumption**	
			Average Power During Call	2.3W