

Iridium® Core 9523



2025-01 v1

Real Time. Mission Critical. Truly Global. - Powerful new possibilities.

The Iridium® Core 9523 advanced transceiver module is small, light and powerful. Its compact footprint and simple connections offer new opportunities to integrate Iridium into printed circuit board (PCB) design and develop products that meet the needs of previously unreachable markets.

Iridium Core 9523 supports all Iridium narrowband voice and data services. Reliable coverage solutions built using the Iridium satellite network, are enabled by a constellation of 66 Low-Earth Orbit (LEO) mobile satellites that provide service anywhere on the planet. Low-Earth Orbit (~800 km) enables signals to travel in 1/40 the time compared to geostationary satellites (36,000 km), resulting in low-latency - ideal for IoT deployments.



- Truly global two-way voice & data communications
- Supports circuit-switched data, RUDICS, and Iridium Short Burst Data® (SBD®)
- Iridium Push-To-Talk (PTT) capable
- Ultra compact form factor

Empowering Data Connectivity, Everywhere.

IRIDIUM CORE 9523 TECHNICAL SPECIFICATIONS

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MECHANICAL DESIGN		
Dimensions	L 70.44mm x W 36.04mm x H 14.6mm	L 2.77" x W 1.41" x H 0.57"
Weight	32 g	1.12 oz
ENVIRONMENTAL		
Operating Temperature Range	-30 to +70 °C	26.6 to +158 F
Operating Humidity Range	≤75 % RH	
Storage Temperature Range	-40 to +85 °C	-40 to +185 F
Storage Humidity Range	≤93 % RH	
Vibration Standard	EN60068-2-14:2009, IEC60068-2-64:2008, EN60068-2-27:2009, SAE J1455, and MILSTD 810	
RF INTERFACE		
Input Voltage Range	+3.2 to +6 V	
Calling Current Average	110 average mA	
Calling Current Peak	300 peak A	
POWER		
OTA Communication	Automotive Pulse Protected	
IMT Support	Safe Shutdown (supercapacitor)	
Low Power Mode	Standby Mode Current 20 mA, at 12 V	
VBOOST POWER		
Nominal Voltage	27 V	
Absolute Maximal Voltage	+35 V	
Minimal Voltage During Call Transmit Burst	10.5 V	
Typical Power on Call	2.3 average W	
Maximal Power on Call	3.1 average W	
NETWORK		
Telephony	Yes	
Location Based Services	Yes	
Certifications	<ul style="list-style-type: none">• Anatel• CE Approval• EU• FCC• Industry Canada• ITU• NRRA – Korea• REACH 201• RoHS	

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