

Iridium 9523N

Compact OEM Module for Global Satellite Voice and Data



Iridium 9523N enables equipment manufacturers to add reliable, two way voice and data communications over the Iridium satellite network.

Designed for direct integration into an application board, the compact module supports Iridium narrowband services including voice calling, Short Burst Data, Push-To-Talk and location-based services. Standardized connectors and a small, lightweight form factor make it suitable for embedded communications devices where space is limited.

With pole-to-pole satellite coverage, Iridium 9523N can support maritime, aviation, land mobile, government and remote industrial applications beyond terrestrial networks.

KEY FEATURES

Global Two Way Satellite Connectivity

Access Iridium narrowband voice and data services beyond terrestrial coverage.

Voice, Data and Push-To-Talk

Support voice calling, Short Burst Data, Push-To-Talk and other compatible Iridium narrowband services from a single module.

Compact OEM Form Factor

Integrate satellite communications into space-constrained devices using a module measuring 70.44 × 36.04 × 14.6 mm.

Direct PCB Integration

Standardized connectors and board-level integration simplify incorporation into new OEM product designs.

Low Voltage Module Power

Operate the main module from a 3.2–6 V DC supply, with a separate VBOOST input supporting call transmission.

Designed for Mobile Applications

Suitable for single-channel and multi-channel communications equipment across maritime, aviation and land mobile markets.

Broad Environmental Range

Operates from -30°C to +70°C and stores from -40°C to +85°C for demanding environments.

International Regulatory Compliance

Certified or approved against a broad range of international regulatory and environmental requirements.



TECHNICAL SPECIFICATION

SATELLITE SERVICES AND RF

Satellite Network	Iridium Low Earth Orbit satellite network
Coverage	Global, including oceans and polar regions, with a clear view of the sky
Supported Services	Iridium narrowband voice, Short Burst Data and Push-To-Talk services
RF Frequency Range	1616–1626.5 MHz
RF Impedance	50 Ω

ELECTRICAL POWER

Main Power Input	3.2-6 V DC, 3.7 V nominal
Standby Current	70 mA typical at 3.7 V
Average Calling Current	110 mA typical
Peak Calling Current	300 mA
VBOOST Input	27 V DC nominal; 10.5-32 V recommended operating range
Calling Power	2.3 W typical; 3.1 W maximum average

PHYSICAL AND ENVIRONMENTAL

Dimensions	70.44 x 36.04 x 14.6 mm / 2.77 x 1.42 x 0.57 in
Weight	32 g / 1.13 oz
Operating Temperature	-30°C to +70°C / -22°F to +158°F
Storage Temperature	-40°C to +85°C / -40°F to +185°F
Operating Humidity	Up to 75% relative humidity

INTEGRATION AND COMPLIANCE

Device Type	OEM satellite voice and data transceiver module
Integration Method	Direct PCB integration using standardized connectors
Vibration and Shock Standards	SAE J1455, MIL-STD-810 and applicable IEC/EN 60068 standards
Regulatory Certifications	Anatel, CE, FCC, Industry Canada, ITU and NRRA Korea
Materials Compliance	REACH and RoHS