

# Iridium Edge® Solar\*

Part #: 9640

Data Sheet

The Iridium Edge® Solar is a standalone and programmable, solar-powered Short Burst Data (SBD®) device that offers real-time GPS tracking and local wireless sensor and communication capabilities over Bluetooth. The product's self charging, low maintenance, long field life and over-the-air configuration allow Iridium Value-Added Resellers to create distinct tracking applications that can also be implemented to create even more complex solutions.

## BENEFITS

**Highly Mobile** - The Iridium® satellite network provides communications and connectivity for mobile applications like oil and gas, transportation, agriculture and surface mining anywhere on the planet allowing tracking and monitoring of vehicles and assets operating in remote areas.

**Reliable Coverage** - Devices 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 Latency** - The Iridium satellites in Low-Earth Orbit (~800 km), enable signals to travel in 1/40 the time compared to geostationary satellites (36,000 km), resulting in low-latency, always-on connections ideal for Internet of Things (IoT) deployments.

## FEATURES

- ▶ Bluetooth capability for wireless sensor integration and local device connectivity
- ▶ Over-the-Air Configuration Changes
- ▶ Interval and Scheduled Reporting Modes
- ▶ Start/Stop Reporting/In Motion Reporting
- ▶ Fully Encapsulated, No External Connectors, Water Ingress Protected
- ▶ Accelerometer and Magnetometer
- ▶ LED Status Indicator

## POWER MANAGEMENT

- ▶ Photovoltaic Solar Cells, Rechargeable and Primary Batteries
- ▶ Smart Power Management System
- ▶ Up to 3-year Shelf Life
- ▶ Up to 10-Year Operational Service Life
- ▶ Back-up battery capacity provides 2x per day reporting for up to 5 years with no solar availability



## MECHANICAL SPECIFICATIONS

<b>Dimensions</b>	164.2 mm x 71.2 mm x 32.9 mm (L x W x H)
<b>Weight</b>	~ 470 grams

## ENVIRONMENTAL SPECIFICATIONS

• <b>Operating Temperature</b>	-40°F to 185°F (-40°C to 85°C)
• <b>High Temperature Resistance</b>	MIL-STD-810G:501.5, IEC60068-2-2 to 185°F (85°C)
• <b>Low Temperature Resistance</b>	MIL-STD-810G:502.5, IEC60068-2-1 to -58°F (-50°C)
• <b>Recommended Storage Temperature</b>	Store below 90°F (32°C) for best results
• <b>Combined Thermal and Humidity Exposure</b>	MIL-STD-810G:507.5, 20-95%RH up to 140°F (60°C)
• <b>Solar Radiation Exposure</b>	UL746C F1, ASTM-G154 to 1.0 yr
• <b>Salt Fog Exposure</b>	MIL-STD-810G:509.5 IEC60068-2-11 to 1000 hrs
• <b>Combined Operational Temperature and Altitude</b>	MIL-STD-810G:500.6 to 15000 ft
• <b>Thermal Shock</b>	MIL-STD-810G:503.5, 20 cycles between -40°F to 185°F (-40°C to 85°C) < 1min transition
• <b>Impact Resistance</b>	ASTM D3763
• <b>Operational Vibration</b>	MIL-STD-810G:514.7, IEC60068-2-80 to 7.5Grms Random (5Hz-2000Hz)
• <b>HALT</b>	Qualmark HALT testing guideline 993-0336, Rev 4 to 50Grms (5Hz – 10000Hz, -40°F to 185°F [-40°C to 85°C])
• <b>Mechanical Shock</b>	MIL-STD-810G:516.7 to 300Gpk
• <b>Reliability</b>	IPC9592a
• <b>Ingress Protection</b>	IP68

## INITIAL RELEASE CERTIFICATIONS

<b>FCC</b>	Part 15, Part 25
<b>Industry Canada (IC)</b>	RSS-210, 247, ICES-003 Class B
<b>EU</b>	R&TTE Directive 1999/5/EC
<b>CB Ordinary Locations Classification</b>	IEC/EN 60950-1, EIC/EN 60950-22, CAN / CSA C22.2 N° 60950-1-03, N°. 60950-22-03
<b>OSHA Ordinary Locations Safety</b>	ANSI / UL 60950-1, 60950-22

## CERTIFICATIONS

<b>Brazil</b>	ANATEL Resolucao N° 506 e Resolucao N° 442
<b>Australia/New Zealand</b>	RCM - CISPR22
<b>Mexico</b>	IFITEL, NOM121

