Iridium Edge® Solar*

Part #: 5080 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





*Preliminary Data Sheet- Information is subject to change

DataSheet_Iridium-EdgeSolar.indd 1 9/13/19 9:34 AM

MECHANICAL SPECIFICATIONS

Dimensions 164.2 mm x 71.2 mm x 32.9 mm (L x W x H)

Weight ~ 470 grams

ENVIRONMENTAL SPECIFICATIONS

• Operating Temperature -40°C to 85°C

• **High Temperature** MIL-STD-810G:501.5, IEC60068-2-2 to 85°C

Resistance

• Low Temperature MIL-STD-810G:502.5, IEC60068-2-1 to -50°C

Resistance

• **Recommended Storage** store below 32°C for best results

Temperature

• Combined Thermal and MIL-STD-810G:507.5, 20-95%RH up to 60°C

Humidity Exposure

• Solar Radiation Exposure UL746C F1, ASTM-G154 to 1.0 yr

• Salt Fog Exposure MIL-STD-810G:509.5 IEC60068-2-11 to 1000 hrs

• Combined Operational MIL-STD-810G:500.6 to 15000 ft

Temperature and Altitude

• Thermal Shock MIL-STD-810G:503.5, 20 cycles between

-40°C to 85°C < 1min transition

• Impact Resistance ASTM D3763

• Operational Vibration MIL-STD-810G:514.7, IEC60068-2-80 to

7.5Grms Random (5Hz-2000Hz)

• HALT Qualmark HALT testing guideline 993-0336, Rev 4

to 50Grms (5Hz-10000Hz, -40°C to 85°C)

Mechanical Shock
 MIL-STD-810G:516.7 to 300Gpk

Reliability IPC9592aIngress Protection IP68

CERTIFICATIONS AVAILABLE AT PRODUCT LAUNCH

FCC Part 15, Part 25

Industry Canada (IC) RSS-210, 247, ICES-003 Class B

EU RED Directive 2014/53/EU, RoHS Directive

2011/65/EU, REACH Regulation EC 1907

CERTIFICATIONS AVAILABLE SHORTLY AFTER PRODUCT LAUNCH

Brazil ANATEL Ato Nº 1120, Resolução Nº 680 e Ato

Nº 14448

Australia/New Zealand RCM - CISPR22
Mexico IFT. NOM121

CB Ordinary Locations IEC/EN 60950-1, EIC/EN 60950-22

Classification

OSHA Ordinary ANSI / UL 60950-1, 60950-22

Locations Safety





H.M.S. Telecom, LLC PO Box 701156 Houston, Texas 77270-1156 U.S.A.

P+1 (832)298-5003 F+1 (832)550-2802 sales@hmstelcom.com https://hmstelcom.com

© Copyright 2019 Iridium Satellite LLC. Iridium, the Iridium logo and Iridium Edge are registered trademarks of Iridium Satellite LLC and its affiliates.

All other registered marks, trademarks, service marks and logos are property of their respective holders. Information is subject to change without notice

