# Iridium Certus™ BCX

Part #: BCX 9810 Data Sheet

The Iridium Certus™ BCX (Broadband Core Transceiver) is the core digital and radio frequency (RF) module of the Iridium Certus® satellite communications service for a variety of service speed classes. Integrated with Broadband Application Electronics (BAE), antenna (BAA), and appropriate amplifiers, the BCX provides multiple data speed rates, three simultaneous high-quality voice calls, and much more. Uniquely designed to support Iridium Certus L-Band services and backed by unmatched network quality, this transceiver delivers cost-effective satellite voice and data communications for single or multi-channel communication platforms for maritime, land mobile, and aviation markets.

#### **BENEFITS**

**Highly Mobile** - The Iridium® satellite network is built for mobility - providing communications and connectivity on the move, anywhere on the planet allowing vehicles and personnel to remain in contact while operating in remote areas without having to stop and set up network access.

**Multi-Service Connectivity** - Through a multi-service communication and connectivity service platform, Iridium Certus will offer high-quality voice, IP Data and Streaming Data.

**Best Value** - Iridium Certus offers visibility and predictability of data usage, as well as seamless broadband connectivity that can be configured to automatically switch between the Iridium network and local infrastructure.

**Reliable Coverage** - Iridium Certus is enabled by a network of 66 Low-Earth Orbit mobile satellites that provide service anywhere on the planet in all weather conditions without compromise.

**Low Latency** - The Iridium satellites in Low-Earth Orbit (800 km), enable signals travel in 1/40 the time compared to geostationary satellites (36,000 km), resulting in low-latency, high-speed, always-on connections.

**Optimal Signal Delivery** - Low frequency L-Band signals can penetrate clouds, fog and rain.

#### **FEATURES**

### **Background IP Data**

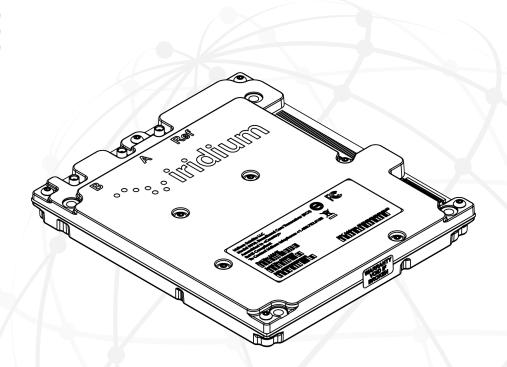
Iridium Certus<sup>®</sup> 100 (up to 88 Kbps) Iridium Certus<sup>®</sup> 200 (up to 176 Kbps) Iridium Certus<sup>®</sup> 350 (up to 352 Kbps) Iridium Certus<sup>®</sup> 700 (up to 704 Kbps)

**Streaming IP Data Capable** 

**High Quality Voice** 

Messaging

**Safety Services** 





## **MECHANICAL SPECIFICATIONS**

**Size** 5.93 x 5.26 x 0.72 in (150.6 x 133.6 x 18.2 mm)

Weight Less than 1 lb (0.5 Kg)

**RF PARAMETERS** 

Frequency Range 1616 to 1626 MHz

**POWER PARAMETERS** 

Input Voltage 12 VDC +/- 10%

**DC Power Consumption** Monitor Mode 12.6 W

Low Data Rate 14.7 W High Data Rate 17.4 W

### **ENVIRONMENTAL SPECIFICATIONS**

**Temperature Ranges** Operating: -40°C to +75°C

Storage: -40°C to +85°C

**Humidity** Storage: ≤ 93% RH

**Shock** 3 half sine pulse shocks in each axis with a peak

amplitude of 10 g and pulse duration of 11 ms

### **REGULATORY STANDARDS AND COMPLIANCE**

**United States of America** 

FCC Compliant Reach Compliant (CFR47 Parts 2 & 15) RoHS Compliant

ETSI EN 301 489-1 V 2.1.0 (2016-04): § 8.2, 9.2

Australia / New Zealand ETSI EN 301 489-20 V 1.2.1 (2002-11)
AS/NZS 60950.1:2015 EU Directives 2002/95/EC and 2011/65/EC
Regulation 1907/2006 EN 60950-1:2006/A11:2009A12:2011/AC:2011

European

10.00000 1.2000// 11.2000/ 112.20

A2:2013

