Iridium Certus™ 9810A

Part #: CERTUS9810A

Data Sheet

The Iridium Certus™ 9810A Broadband Core Transceiver (BCX) is the core digital and radio frequency (RF) module of the Iridium® satellite communications service for a variety of service speed classes. Integrated with Broadband Application Electronics (BAE), antenna (BAA), and appropriate amplifiers, the Iridium Certus 9810A 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 offers high-quality voice, IP Data, and secondary data flows.

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 Services are enabled by a network of 66 mobile satellites that provide service anywhere on the planet in all weather conditions without compromise.

Low Latency - Iridium satellites, located 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.

Power Savings – For lower data speeds, the 9810A can be configured to operate with one DSP instead of two, reducing power consumption by almost 2W.
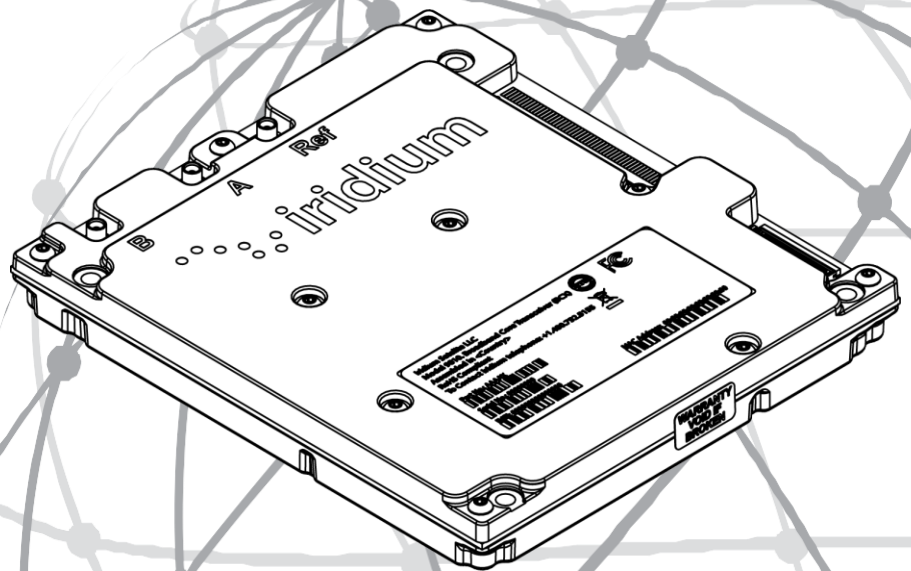
FEATURES

Background IP Data

    Iridium Certus® 100 (Up to 88 Kbps)
    Iridium Certus® 200 (Up to 176 Kbps)
    Iridium Certus® 350 (Up to 352 Kbps)
    Iridium Certus® 700 (Up to 704 Kbps)

High Quality Voice

Safety Services

Secondary Data Flows

Prepaid Services

01120

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MECHANICAL SPECIFICATIONS

Size	150.6 x 133.6 x 18.2 mm (5.93 x 5.26 x 0.72 in)
Weight	Less than 1 lb (0.5 Kg)

RF PARAMETERS

Frequency Range	1616 to 1626 MHz

POWER PARAMETERS

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Input Voltage	12 VDC +/- 10%
DC Power Consumption	Certus 700 17.7 W (Dual DSP) Certus 350 17.1 W (Dual DSP) Certus 200 15.0 W (Single DSP) Certus 100 14.8 W (Single DSP)

ENVIRONMENTAL SPECIFICATIONS

Temperature Ranges	Operating: -40°C to +75°C Storage: -40°C to +85°C
Humidity	Storage: ≤ 93% RH

Shock	Handling Drop
	   Reference SAE J1455:2012
	   Section 4.11.3.1
	
	Thermal Shock
	   Reference SAE J1455:2012
	   Section 4.1.3.2
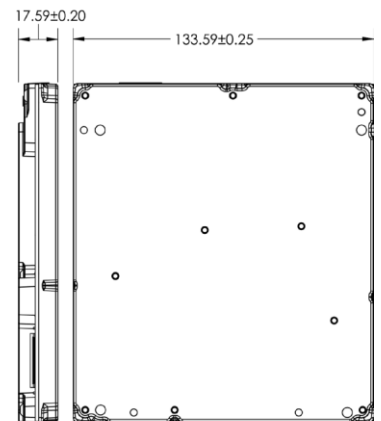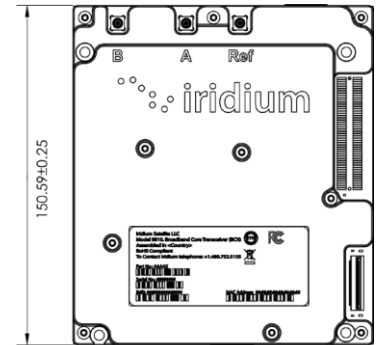
REGULATORY STANDARDS AND COMPLIANCE

United States of America
FCC 47 CFR Part 15B, ICES-003 and ISEDC RSS-GEN

Europe
REACH SVHC, Restriction
RoHS
EU POP
EU Directives 2011/65/EU, 2015/863/EU
ETSI EN 301 489-1 V 2.1.0 (2016-04): § 8.2, 9.2
ETSI EN 301 489-20 V 1.2.1 (2002-11)
IEC 62368-1

Australia / New Zealand
AS/NZS 60950.1:2015
Regulation 1907/2006

Japan
Japan VCCI-32-1:2016