SATRAD MATRIX iSeries BC

SATRAD MATRIX iSeries comprises a family of products to permit users to Succeed. Anywhere. The SATRAD MATRIX iSeries BC integrates satellite communications with dispatch consoles.

Always Available

You can depend on the satellite backhaul to provide reliable, ubiquitous coverage no matter where you are. Satellite backhaul eliminates reliance on radio towers, land lines and fibre. Your communications system cannot be interrupted by an errant backhoe operator accidentally cutting through a fibre-optic cable. Weather events such as hurricanes can devastate radio towers and related infrastructure, however our satellite backhaul is secure, riding high above the storms.

Reliable and Consistent

The SATRAD MATRIX is closely integrated with the satellite communications network. Network Innovation's engineers have recognised that in dispatch centres, especially during emergencies, consistency of operation is of paramount importance. Communications via terrestrial radio should not di er from communications over the satellite communications system. The SATRAD MATRIX ensures a dispatcher need only push to talk and immediately commence speaking. There are no "go-ahead" tones, the user experience is consistent with dispatching on terrestrial radio.

Smart Messaging

The SATRAD MATRIX employs Smart Messaging. Voice messages are intelligently managed, for example should two users at di erent locations push to talk at the same time, one message will be delayed until the other message has been transmitted, then Smart Messaging will transmit the delayed message. Messages are never lost.

Console Integration

The SATRAD Matrix supports industry standard four wire, 600 ohm balanced audio on full duplex circuits. Industry standard EIA tone signalling as well as E & M signalling are supported. Audio levels are configurable / adjustable over a wide range from -24 dBm to +12 dBm. Network's skilled engineers are available to assist with integration and configuration if required.

Multiple Talk Groups

Talk groups / communications channels may be selected via EIA tones.

Handset with Display

A slim handset with integrated display and keypad is available. The handset o ers the user a degree of privacy while making a call.

The display on the handset provides status information relating to the satellite connection, the selected talk group / communication channel as well as providing a means for the user to adjust the settings to suit their specific preferences.

The handset enables the selection of talk groups / communications channels.

Power Conditioning

The SATRAD MATRIX iSeries-BC includes a high e ciency switching power supply, backup battery and an intelligent battery charger.

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Installation

The SATRAD MATRIX iSeries-BC features a robust compact enclosure with a mounting flange incorporating pre-formed mounting holes.

The enclosure is designed to protect against harsh, industrial environments and meets;
   UL 508 Type 3R, 4, 12 and 13
   CSA Type 3R, 4, 12 and 13

The enclosure complies with;
   NEMA Type 3R, 4, 12 and 13
   IEC 60529

The enclosure is IP66 rated.

The body and cover are formed from 16 gauge steel featuring smooth, continuously welded seams with a formed lip on enclosure and oil resistant gaskets to exclude liquids and contaminants.

The enclosure features a continuously hinged cover with 304 stainless steel hinges and providing 180° opening for easy access to the interior. There is a door latch with a quarter turn slot actuated lock requiring the use of a tool for opening. The cover and enclosure are finished in smooth ANSI 61 grey powder coating.

Network

SATRAD MATRIX iSeries units operate over the Iridium network which provides global coverage.

Specifications

Dimensions	445 x 360 x 168 mm (17.5 x 14 x 6.6 inches)
Weight	11 kg (24.5 lbs)
Input Power	110 - 240 VAC 50/60 Hz
Power Cable	Detachable with IEC connector
Cooling	Convection
Analogue Inputs/Outputs	Console, Auxiliary, Microphone, Handset
Analogue I/O Configuration	4 wire, Balanced 600 ohm
Total Harmonic Distortion	<0.1 %
Frequency Response	40 - 5,000 Hz +/- 3 db
Signal to Noise	> 50 db
Level	-24 dBm - +12 dBm
Communications	RS-232, RS-485, IEEE 802.3 LAN via RJ-45
GPS	NMEA proprietary sentences