RemoteSAT - RST100

The Beam Remote Satellite Terminal provides reliable and convenient global telecommunications access voice, data & messaging services via the Iridium satellite network.

The RST100 Remote Satellite Terminal is a purpose built communication terminal for the Iridium Satellite Network. Using the Intelligent RJ11 interface of the terminal makes it ideal for use in various installations, including;

- Maritime
- In-building
- Remote Sites
- Remote Communities
- Disaster Recovery
- Homesteads
- Campervans
- Pay Phones
- Aircrafts

Iridium Satellite System

Iridium is the only provider of truly global satellite voice and data solutions with complete coverage of the earth. Iridium delivers essential communications services to and from remote areas where no other form of communication is available.

The Iridium system is the largest fully meshed satellite network constellation in the world and consists of 66 low-earth orbiting (LEO), cross-linked satellites and has multiple in-orbit spares.

Easy Access to Voice Services

Voice services can be easily accessed anywhere on earth using a compact Intelligent Handset or via standard telephone handsets. This means voice communications can be easily accessed using standard Corded, Cordless, DECT or PBX systems.

Data & Messaging Service

The Iridium SMS can send and receive messages of up to 160 alphanumeric characters, in a single message providing;

- Two-way global text messaging
- Send to and from other Iridium subscribers
- Send to and from cellular subscribers (Selected Providers)
- Send to and receive from email addresses.

The terminal also supports the following Iridium Data Services;

- Circuit Switched Data
- Direct Internet
- RUDICS
- Short Burst Data

PSTN Emulation / RJ-11

The RJ11/POTS interface emulates PSTN (Public Telephone Service) features and is equipped with off-hook detection, configurable Ring, Busy & Dial service tones.

The Beam RST100 supports long runs of standard copper telephone wire and multiple extensions can be connected to the terminal over distances up to 1000m.

PBX / In-building Integration

The RST100 can be easily integrated into a PBX system using the RJ11 connection, enabling calls to be made or received from any extension within a building. In-building integration is ideal for lower costs satellite calling as well as emergency backup.

Intelligent Dialling

The Beam terminal is capable of being programmed to pre-empt such dialing codes as the international access of "00" country codes and or area codes. The intelligent number processing is ideal for various applications to enable ease use by any user. Call barring and restricted dialling within certain countries or area codes can also be configured if required.

Intelligent Handset Interface

The optional Intelligent Handset, RST970, provides voice and SMS communications as well as an easy menu system to access phone settings.

Network Access Features

- Global coverage – pole to pole
- Low cost airtime rates
- No regions or zones
- Crew calling service
- Pre or post paid
- Itemised billing
- Support all data services
- Support all Voice services

Terminal Features

- Uses intelligent handset
- Supports standard phone equipment
- Connect to PABX
- SMS / SMSMO from terminal
- Supports SMS over POTS
- SSAS compatible
- Tracking & Monitoring Capable
- Intelligent Processor & Interface
- Phone Number Processing
- Line Reversal for Pay phone use
- Auto-dial & Speed Dial options
- Secure SIM Card Enclosure
- Local and Remote Configuration
- External Ringer available
- Supports Back up Battery
- Incorporates Call Logging
- Fully Certified – corrosion / vibration
- Easy to install

SSAS - Tracking / Alert Monitoring

The RST030 TrackALERT terminal enables the Beam Remote Satellite terminal to support an alert, tracking and or monitoring applications.
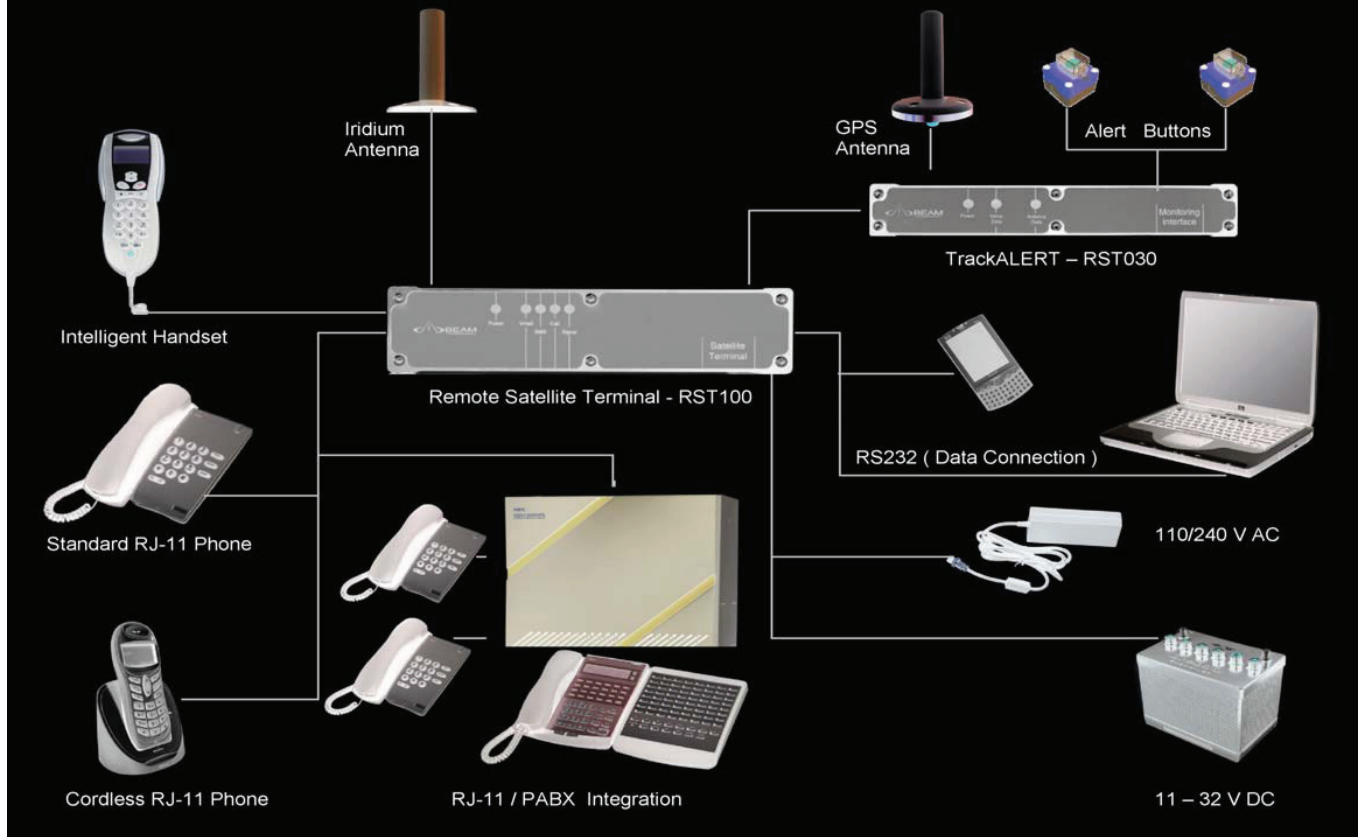
Ship Security Alert System

The Beam / Iridium SSAS solutions incorporating the RST030 TrackALERT with the Beam Remote Satellite Terminals, enables full compliance with all SOLAS XI-2/6 mandated SSAS regulations.

Tracking Applications

The TrackALERT interface provides an intelligent vessel or vehicle tracking interface and enables you to configure individual reporting fields such as long/lat/speed/direction/height as well as the status of alarms or other digital / analog inputs as configured on the terminal.

Toll Free (North America): 1 888 949 9924
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www.roadpost.ca

Installation Options

![BEAM logo]

- Iridium Antenna
- Intelligent Handset
- Standard RJ-11 Phone
- Cordless RJ-11 Phone
- RJ-11 / PABX Integration
- Remote Satellite Terminal - RST100
- GPS Antenna
- Alert Buttons
- TrackALERT – RST030
- RS232 (Data Connection)
- 110/240 V AC
- 11 – 32 V DC

Technical Specifications

Iridium Network

L-Band transceiver frequency	1616 - 1625 MHz
Compressed Data	2.4 kbps
Voice / data modulation	10 - 12 kbps

Satellite Constellation

Inter-satellite Links	23.18-23.38 GHz, Ka-band
Ground Segment Links	
Downlinks	19.4-19.6 GHz, Ka-band
Uplinks	29.1-29.3 GHz, Ka-band

RST100 - Remote Satellite Terminal

Power Specifications

Power input voltage	11 - 32 V DC	
Power Consumption (AMPS)	12 V DC	24 V DC
Stand-by	0.35	0.16
Transmit	0.51	0.25
Stand-by - inc handset	0.47	0.22
Transmit - inc handset	0.59	0.29

Physical Specifications

	Unit only	Packed
Dimensions - mm	225 x 277 x 53	400 x 325 x 90
Dimensions - inches	8.8 x 10.9 x 2.0	15.7 x 12.8 x 3.5
Weight - kg	2.25	3.25
Weight - lbs	4.9	7.1

Environment Specifications

	Degrees C	Degrees F
Temperature		
Operating Range	-15 to +55	+5 to +131
Storage	-30 to +70	-22 to 158
Humidity	93% non condensing	
Vibration	2 Hz - 13.2 Hz & 13.2 Hx - 100 hz	
Corrosion	40 C with 90% - 95% relative humidity after 2h salt spray	

Certifications

- IEC60945
- Germanischer Lloyd
- American bureau of Shipping
- electrical Safety
- EMC Compliance

Connectors / Interfaces

Intelligent Handset	RJ45 DPL BUS
Telephone / POTS	RJ-11 2 -wire / TN12 or 600Ω
Data Port	RS232 Serial Interface
Log Port	RS232 Serial Interface
Power	2 Pin screw type

LED / Display

Power	Green
Signal	3 Colour
Call	Yellow
Voicemail	Green

Kit Contents

- RST100 Main terminal
- Mounting Brackets
- AC 110/240V Plug Pack
- DC 1.5m Power Cable
- Data Cable
- User & Installation Manual
- CD - Beam Management System, AT Commands, Manuals

Accessories

Mast mount antenna	Green
Intelligent Handset	3 Colour
Antenna cables	Yellow
6 m / 18 f	RST932
9 m / 27 f	RST930
12 m / 36 f	RST933
SSAS / TrackALERT	RST030
External ringer / alarm	RST952