Remote Satellite Terminal RST100

The Beam Remote Satellite Terminal provides remote locations with global telecommunications access via the Iridium satellite network.

The Remote Satellite Terminal RST100 is a highly featured communications terminal providing intelligent voice, data and messaging communications.

Market Applications

The RST100 is designed for all remote communications applications for mobile or fixed use. These markets include Maritime, Transport, Defence, Emergency Services, Mining, Construction, and Rural Communities and the like.

RJ-11 / PSTN Emulation

The RST100 provides an intelligent RJ11/POTS interface emulating features of a PSTN (Public Telephone Service).

The unit is equipped to provide selectable line voltages and currents for ring and service tones, along with off-hook detection.

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

Intelligent Handset Interface

The optional Intelligent Handset, RST970, provides voice and SMS communications. The handset is compact, lightweight, easy to install and comes complete with hang-up cup. The handset has a built in ringer, supports full SMS functionality as well as an easy menu system to access phone settings.

PBX / In-building Integration

The Remote Satellite Terminal can be easily integrated into a PBX system using the RJ11 connectivity. This enables calls to be made or received from any extension within a building via the satellite network.

In-building integration is ideal for lower costs satellite to satellite calling as well as emergency backup to the PSTN networks

Alert / Tracking Interface

The RST100 is capable of supporting the Beam TrackALERT interface. This will support deployment for tracking, monitoring and emergency alert installations. The TrackALERT interfaces are available with inbuilt or external GPS receivers.

Ship Security Alert System (SSAS)

The RST100 when used with the TrackALERT interface is fully compliant for the Solas Regulations.

Ship Security Applications

RST100 Key Features

- Connect to PBX / Standard Phones
- Iridium Voice & Data Services
- SMS / SMSMO
- SMS POTS Capable
- Crew Calling
- Ship Security Alert System, Capable
- Tracking & Monitoring Capable
- Intelligent Processor & Interface
- Phone Number Processing
- Line Reversal for Pay phone use
- Secure SIM Card Enclosure
- Supports Intelligent Handsets
- Remote or Local Master Reset
- Local and Remote Configuration
- External Ringer available
- Supports Back up Battery / Solar
- Incorporates Call Logging
- Optional In-Vehicle Hands-Free Kit
- Fully Certified

SMS POTS Support

The Beam Remote Satellite Terminal allows the use of an SMS POTS handset.

SMS POTS is a new feature that enables selected standard type telephone handsets to support SMS functionality previously only available on more expensive Intelligent Type handsets.

The specialised handsets connect to the RST100's RJ11 connector and enable SMS messages to be sent, received and stored in the same way as a cellular phone operates. Cordless and corded options are available.

Power Inputs / Backup Battery

Beam terminals support 11-32V DC power input. An AC plug-pack is supplied with all terminals, which makes it easy to connect to mains or DC power.

The use of an RST050 Beam Battery Back-up is an ideal accessory where guaranteed communication is required.

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Remote Satellite Terminal RST100

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Voice Services

The RST100 terminal will allow the use of an Intelligent Handset and the use of standard phone equipment through its intelligent RJ11 connectivity. This means that standard cordless, corded or PBX systems can be integrated for voice communications on this terminal.

- Standard RJ11 Handset Voice Calls
- Intelligent Handset Voice Calls
- Crew Calling
- Post Paid / Pre-paid Calls

Data Services

All Beam terminals support all of the Iridium Data services available. This then provides a flexible means by which to communicate using one or more of the following protocols:

- Dial-Up Data Service
- Direct Internet Data 10-12 Kbps
- Short Message Service (SMS)
- Short Burst Data (Selected Providers)

Configuration

The Intelligent processor inside the RST100 interface enables the terminal to be configured remotely or locally. Locally it can be simply configured with a PC using the Beam Management System (BMS) software supplied with the TrackALERT terminal.

Whilst using the BMS is the most simple, it is also possible to configure most of the fields by sending commands to the terminal using either SMS.

Phone Number Processing

The RJ11 port 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. It is also possible to enable the programming of direct Emergency Number Numbers and short code voicemail box numbers as required.

In-Vehicle Use

The major benefit of using the RST100 for a vehicle environment is the flexibility to use a cordless handset for away from vehicle communications. This is ideal for emergency vehicles and where ever constant communication is required.

The optional In-vehicle hands-free kit for the RST100 provides the flexibility of having a fully integrated system into any type of vehicle for safe hands-free use.

Global Communications

Installation

The RST100 can be deployed for various applications. Selecting an appropriate antenna and antenna cable for the installation is very important for optimum performance. Mounting brackets, configuration CD and a 110/240 AC/DC plug pack is included with the terminal.

The RST100 provides great flexibility for various installations. The RJ11 socket will support 3 REN, which allows long distances of standard telephone wire to be run. This minimizes the need for long antenna cable runs in most installations.

Emergency Applications

When using the Intelligent Handset consideration must be given to the proximity to the terminal, this distance is limited to a maximum of 30 metres using approved extension cables.

Specialised Installations

The RST100 can easily be adapted to be used in conjunction with specialised installations. Some of these applications include card or coin Payphones, Rural Community and Highway Emergency applications.

Specifications

Function	Specification	
Power		
Input Power	11 – 32V DC	
Visual Indication		
Power	LED Front Panel	
Call	LED Front Panel	
Signal	LED Front Panel	
SMS	LED Front Panel	
Voicemail	LED Front Panel	
Dimensions		
Length	225 mm	
Width	271 mm	
Height	45 mm	
Weight	2.25kg	
Temperature		
Operating	-15C to +50C	
Storage	-40C to +70C	
Humidity	<85%non condensing	
Power Consumption	12 v	24 v
Standby	0.35	0.16A
Transmit	0.51A	0.25A
Standby *	0.47A	0.22A
Transmit *	0.59A	0.29A
* With Intelligent Handset		

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