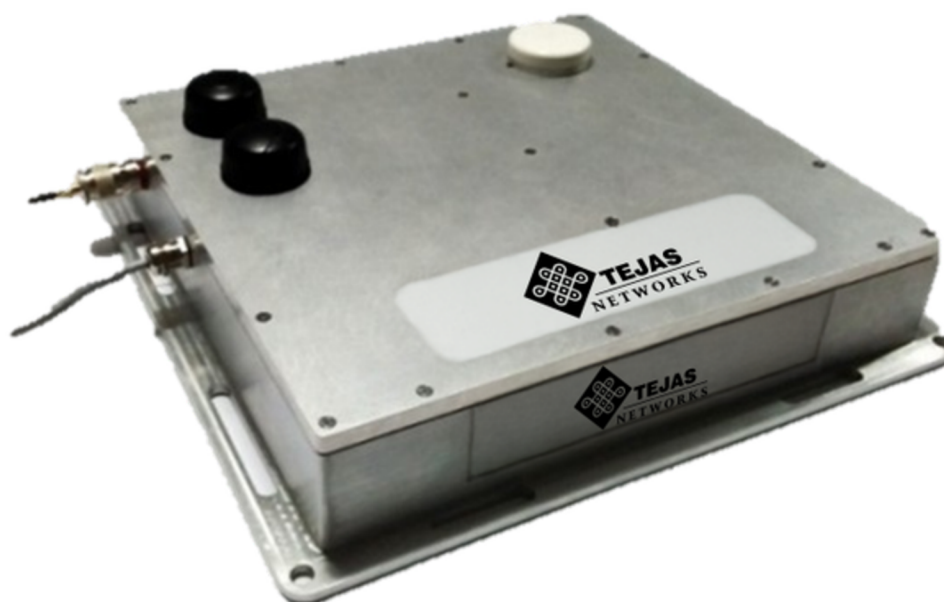


Navrail

Two-Way Mobile Satellite Service Terminal







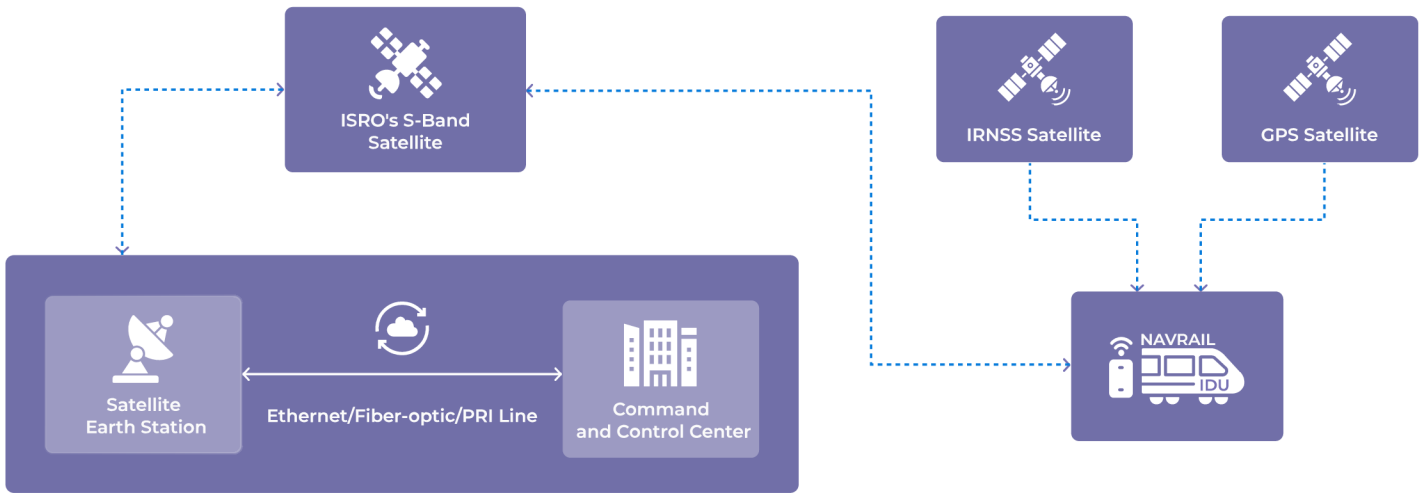
Navrail is a Two-way Mobile Satellite Service terminal designed for real-time tracking of locomotives. It has S-Band Modem and GPS Modules which transmit geo-location coordinates and other data to remote hub using ISRO's GSAT Satellite. The solution will enable users to track the live location of the locomotive using a specially designed app and website

The solution aids and assist in better management of train movements, enhances operational efficiency and notify delays and estimated time of arrival to passengers.

The solution is designed to inter-operate with Tejas' Hub baseband and currently operationalized on ISRO Satellite.

Features

-  Real Time Locomotive Tracking
-  Communication via ISRO GSAT Satellite
-  Interoperates with Tejas Hubsid equipment
-  Configurable Data Rates and OTA Software Upgrades



Network Diagram

Benefits to Stakeholders



Government Agencies

Use Data Analytics for locomotive management to drive efficiencies



Railways

- Reliable Hub-to-Locomotive and Locomotive-to-Hub communication
- Real-Time Locomotive Tracking



Travellers

- Receive real time information about train arrivals, departures and delays
- Receive emergency broadcasts



Coast Guard

- Use GIS mapping to increase the efficiency and punctuality of transport work
- SOS and Emergency Communication

Technical Specifications

Tx Frequency Band	2560 - 2590 MHz
Rx Frequency Band	2670 - 2690 MHz
Tx Data Rate	32 Kbps scalable to 512 Kbps
Rx Data Rate	1.2/ 2.4/ 4.8/ 9.6 in burst transmission
Rx Transmit Power	+36dBm EIRP
Dimensions	203mm x 156mm x 105mm
Interface	Ethernet
Casting	IP 67 Compliant



HQ: Bangalore, India

New Delhi | Gurgaon | Mumbai | Kolkata | Chennai

www.tejasnetworks.com | +91-80-4179-4600

info@tejasnetworks.com

- | | |
|--------------|------------|
| USA | UAE |
| UK | MALAYSIA |
| KENYA | SINGAPORE |
| SOUTH AFRICA | MEXICO |
| NIGERIA | BANGLADESH |
| ALGERIA | |