

BS TECHNOTRONICS PRIVATE LIMITED



ISO 9001:2015



ARAI
Progress through Research

IS 16833:2018

***AIS140 IRNSS
Certified Device***

2G GSM

IRNSS & GPS

7 – 36V DC

IOs

RS-232

CAN*

IP67

BSTPL-17IS

BSTPL-17IS is an advanced vehicle tracking device complying to newly introduced intelligent transport system standards, AIS-140 and IS 16833:2018. BSTPL-17IS Designed for complying to standards like IS 9000, ISO 16750, AIS 004, IEC 60529, IS 2465, ISO 6722 and ISO 7637. In addition to fulfilling the functionality requirements as required by AIS-140, the device meets interface requirements like multiple IO Ports, SOS (Emergency Button), RS-232 interfaces and CAN* Interface.

Considering the mandate of government of India to have vehicle tracking device with one or more emergency buttons in all existing and new public service vehicles complying to AIS140 standard, BSTPL-17IS is designed keeping in view the Indian operating conditions. Software functionalities are built to integrate the device with the governments command centre and send emergency alerts as mandated in the regulation.

BSTPL-17IS is equipped with advanced high-speed microcontroller supported by highly sensitive IRNSS/GNSS Receiver and 2G GSM Transceiver. With built-in high quality 2G GSM modem, BSTPL-17IS supports 2G GSM networks operating on 850/900/1800/1900 MHz frequencies. With Internal GSM, IRNSS and GNSS Antennas, BSTPL-17IS delivers accurate real time data in toughest environmental and operating conditions. Compact in size, BSTPL-17IS enables easy handling and easy installation.

Supporting four different types of protocols, device has provision for generating alerts for Emergency Button, Box Tamper, Ignition On/Off, Vehicle Battery Connect / Disconnect, Internal Battery Low, Harsh Breaking, Harsh Acceleration and Harsh Maneuver. Supporting wide DC operating voltage range of 7-36V, BSTPL-17IS is equipped with Internal battery for continuous operation when main power is disconnected or tampered.

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Note: * Indicates Optional Feature / Function

Features

- ✓ Advanced High-Speed ARM Cortex Microcontroller
- ✓ 45000 Data Packets Storage. Expandable to 100000 Data Packets
- ✓ Supports Quad Band 2G GSM
- ✓ Auto fall back from GPRS to SMS & Vice Versa
- ✓ Supports SMS; TCP/IP; FTP, HTTP, HTTPS & MQTT & MQTTS Communication Protocols*
- ✓ Internal GSM Antenna Supporting 2G GSM
- ✓ Supports Nano SIM Card and dual profile eSIM
- ✓ Supports IRNSS, GPS & GLONASS
- ✓ 33 Tracking and 99 Acquisition channels with -167 dBm Sensitivity
- ✓ Horizontal Position Accuracy of <3 meters CEP @ -130 dBm (Open to sky)
- ✓ Built in Embedded IRNSS & GNSS Antennas
- ✓ Provision for Bluetooth 4.0 with built in antenna
- ✓ Four Digital Inputs & Two Analog Inputs
- ✓ Two Digital Outputs & One SOS Interface
- ✓ One RS-232 Interface & One CAN* Interface
- ✓ Wide DC Input Operating Voltage (7V to 36V)
- ✓ Main Power Reverse connection protection
- ✓ Main Power Over Voltage protection
- ✓ 3.7V Internal Li-Ion Battery
- ✓ Main Power Voltage Reading
- ✓ 3 Axis Accelerometer & Gyrometer
- ✓ LED indication for Main Power, Internal Battery, GSM and IRNSS/GNSS Networks
- ✓ Box Open / Close detection
- ✓ Main Power Connect / Disconnect Alert
- ✓ GPS Odometer
- ✓ Sleep Mode function for extended internal battery backup time
- ✓ Nylon Plastic Enclosure complying to IP67
- ✓ Complies With IECEx Standards
- ✓ Local and Over The Air (FOTA) Software Update
- ✓ Local and Over The Air (OTA) Configuration
- ✓ Secured Over The Air (OTA) Configuration
- ✓ 16 Core Cable

Technical Specifications

SPECIFICATION	DESCRIPTION	SPECIFICATION	DESCRIPTION
Microcontroller	ARM Cortex Microcontroller 256KB Program Memory & 96KB RAM	Communication Protocols	SMS; TCP/IP; FTP, HTTP, HTTPS & MQTT & MQTTS
Internal Memory	64Mb. Supports 45000 Data Packets Storage When No GSM/GPRS Network 100K Erase & Program Cycles. 20Years Data Retention Expandable to 128Mb	Mechanical	Nylon Enclosure complying to IP67. Dimensions: 118 x 77 x 31 mm
Power Supply	7 – 36V DC	Sensors	3 Axis Accelerometer & Gyrometer
Internal Battery	3.7V / 1000 mA Li-Ion Battery		Box Opening / Closing
2G GSM	Quad Band GSM Sensitivity: -109dBm.	Standards Complying	IS9000, ISO16750, AIS004, IEC60529, IS2465, ISO6722, ISO7637 and IP67 Complies with IECEx standard
IRNSS & GPS	Supports IRNSS, GPS & GLONASS 33 Tracking and 99 Acquisition channels, -167 dBm Sensitivity, Horizontal Position Accuracy of <3 meters CEP @ -130 dBm (Open to sky)	Configuration & Firmware Update	Local and OTA Configuration. Supports SMS & GPRS Configuration Supports FOTA
SIM Support	Supports eSIM with Automatic Profile Switching. Optional Nano SIM	LED Indications	Main Power, Internal Battery, GSM and GPS Network
Inputs & Output Interfaces	4 Digital Inputs & 2 Analog Input 2 Digital Outputs & One SOS Input One RS-232 & One CAN* Interface	Protections	Main Power Over Voltage Reverse Connection Tamper Detection ESD Protection

Note: BS Technotronics Private Limited (BSTPL) reserves the right to alter this description or to adapt it to technical conditions at any time.



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