



Intelligent Tracker SS71

Intelligent Device for Driver Safety and ECO Driving Application

SilverStar new SST-71 offers enhanced functionality and performance for fleet management and AVL services, as well as other advanced Telematics applications in the areas of journey and driver management, location and communication management for fleet owners and managers, service companies, insurance companies, car manufacturers and more. Some of these applications include route planning, vehicle access control, and event prioritization for distress situations. In addition, SST-71 is integrated with variety of 3rd party accessories such as Garmin terminals, ' hands free ' voice kit, fuel sensor, car alarm system, driver identification devices and many more.

SST-71 is an innovative all-in-one GPS-GPRS device, equipped by built in quad band GSM/GPRS modem, STM STA8088 GPS engine, powerful ARM7 based CPU and 3D accelerometer. It is compatible with any road vehicle type and fully certified to meet automotive, radio and safety standards in India, Africa, Europe and North America.

Features

Vehicle Access Control

An iButton™ or any other compatible device, such as keypad and contact less proximity card, is used to monitor driver's identity. The SST-71 unit generates appropriate messages to report driver verification status. An optional starter interrupt can be used to immobilize the vehicle until the driver is authorized. An external buzzer can be activated as a reminder for driver authorization and feedback on a successful authorization process.

Trip Data Reporting

The standard trip data recorded includes: trigger of event, date and time, location with its validity status, total vehicle distance, momentary speed or maximum since the last report speed, vehicle's internal batteries measurement, internal battery temperature and charging status, driver ID, and unit IO status, such as RPM and fuel level. The unit can maintain a log of up to 9k full time stamped location events when the engine is off.

Violations Monitoring

The standard monitoring of violations events includes: start and stop driving, time and distance reports, over speeding, over revving (RPM), harsh braking, rapid acceleration, excessive idling and violation of Geo-zones.

Location Management

Online or Offline tracking- uploading generated events in real time as they are generated, or offline, by the end of the day or by command.

Route Planning - programming the unit with 100 rectangular way-points, which are passed in specific times, otherwise the unit will generate an alert.

Communication

Communication Methods – the units include a GSM/GPRS modem, allowing communication over TCP/IP or UDP/IP with auto-switching to SMS, which can also be configured to be the primary mode of communication.

Voice Calls – SST-71 unit supports hands free kit, enabling to receive voice calls from any number and initiate voice call to central control.

Jamming Detection and Reaction – embedded capability to monitor and detect GSM/GPRS jamming attempts and corresponding local reaction to avoid vehicle theft or drawing environment's attention.

Installation & Maintenance

Covert installation - the unit's small size and monoblock structure allows effective covert installation in various places in the vehicle.

OTA (Over-The-Air)

Programming – All parameters are fully configurable from remote.

Firmware upgrade – full remote firmware upgrade for efficient and faster customer support and enhancement of service offering

Technical Specifications

Communication	GSM Modes	GPRS CLASS 10, PDU SMS
	Bands	Quad band: 850, 900, 1800, 1900MHz
	`Power Output	2W, 1W
	SIM	Internal, replaceable, remote PIN code management
	Antenna	Internal, quad band GSM antenna
	Packet Data	TCP/IP, UDP/IP
	SMS	PDU, text SMS for data forwarding
GPS	Technology	STM STA8088 Chipset
	Sensitivity(Tracking)	-162dBm
	Acquisition(normal)	Cold < 35Sec, Warm < 35Sec, Hot < 1Sec
	Antenna	On board, internal patch antenna $ \label{eq:continuous} $ Optional external Active antenna (2.85V $\pm 0.5\%$), automatic switching, standard SMA connector
nputs & Outputs	Inputs	1 internally pulled down input dedicated for ignition switch 3 internally pulled up Discrete Dry inputs with assignable functionality and configurable threshold for logical high and low states. 2 configurable inputs capable to serve as: Frequency counters - configurable resolution; Up to 5kHz input signal; Signal level (3V < Vin 30V); Accuracy ±2% Analog inputs with variable resolution - 8bit, adapted to 0-2.5V signal resolution 20mV, accuracy ±20mV; 8bits, adapted to 0-30V signal, resolution 100mV, accuracy ±100mV Discrete Dry – configurable threshold for logical high and low states. Discrete Wet - configurable threshold for logical high and low states.
	Outputs	5 general purpose open drain outputs (250mA max) with assignable functionality.

	Interfaces	Voice interface
		- SST-71 HF compliant
		- Full duplex
		- Echo cancellation
		- Noise suppression
		- Spy listening option
		- Auto-answer option
		- Volume control by single button or two buttons
		- Distress voice call and plain call generation
		COM (RS232) port
		- Selectable baud rate (9600 or 115000bps)
		- True RS232 levels
		- 8 bit, 1 Stop Bit, No Parity
		- MDT Interface
		- Garmin™ Interface
		- Car Alarm Interface
		- Transparent data mode
		- Configuration update
		- Firmware upgrade
		1-Wire™ (Dallas port)
		- Driver management
		- Car Alarm Authorization
Power	Input Voltage	7-32VDC
	Average Current	Normal: 45mA
	consumption	Economic: 16mA Hibernation:<2mA
		Shipment (Off):<20uA (Internal Battery)
	Internal Battery	Li-Ion Polymer, 3.7V, 900mAh, rechargeable.
Environment	Temp, operating	-30C to +70C full performance40C to +85C – degraded communication
	Humidity	95% non-condensing
	Protection	IP40
		ISO 16750
	Vibration, Impact	130 10730
	Mounting	Tie-wraps and/or two sided adhesive
Dimensions & Weight		