telital
Automotive

SR 11
NETTUNO

GSM BASED
GPS
LOCATION SYSTEM

SR11 NETTUNO
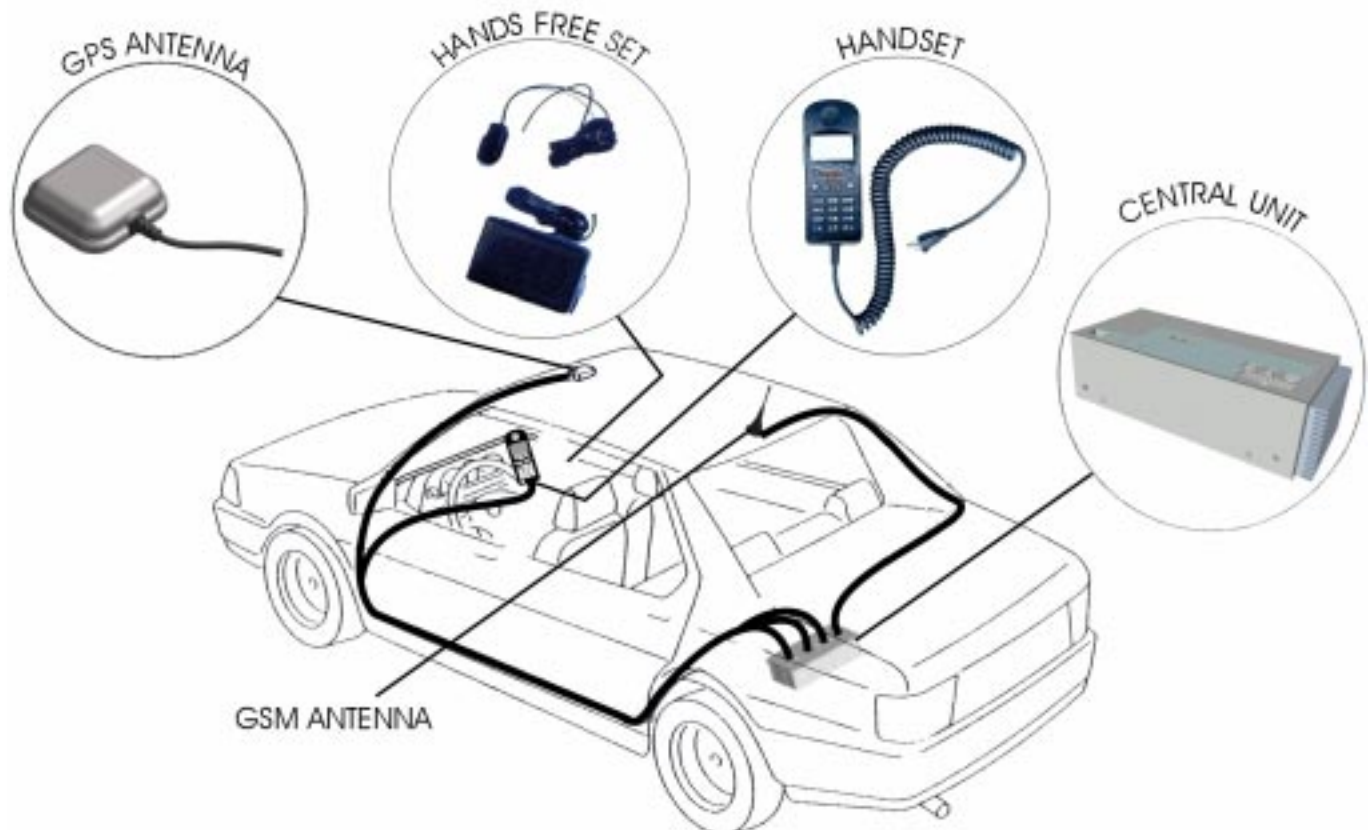# GSM BASED
GPS LOCATION SYSTEM

DESCRIPTION

The system is comprised of a mobile set to be installed on a vehicle and a Base Station, which can determine the vehicle's position and supply the user with a number of useful services.

5   The core of the mobile set is enclosed in a metal case containing the GPS receiver, the cellular phone for communicating with the Base Station and a CPU which handles all the necessary functions available.

The core of the Base Station is a management software which makes it possible to display the vehicle's position, monitor mobile device's inputs and outputs, communicate with as well as store data relative to that vehicle.

10   Be it used as a location system for fleet management, an advanced security system or an ordinary vehicle mobile phone, the mobile device is at any one moment in a «precise» state; at every state events may take place which the system reacts to by performing a specific action or changing from one state to another.

Operators at the Base Station know all this and carry out all necessary and opportune actions to give the vehicles service as planned.

MOBILE SET

GPS RECEIVER

- Reception: continuous on 12 channels

- Precision of detected position: typically 100m

5 - Acquisition time   cold start: typically 2 minutes
                                   hot start: typically 20 seconds
                                   re-acquisition: < 2 seconds

USER INTERFACES

Handset with keyboard and display 10

The handset enables voice communication as well as all typical functions of a cellular GSM phone like phone book management, MO MT SMS, on display indications, security features, menu customization. 15

Moreover the handset supports all functions related to the location activity like visualisation of the position as longitude and latitude. Visualisation of 20 UTC (Universal Coordinated Time) time, number of Satellites useful for computing and safety: password insertion, speed dial push buttons for specific requirements towards the Base Station. 25

NOTICE! The cellular phone is built into the metal case so that the system can communicate with the Base Station even if/when there is no handset.

30 **Handsfree**

Loudspeaker and microphone for handsfree communications.

Panic Pushbutton

A panic pushbutton can be disguised as desired on board the vehicle. When pressed, the pushbutton alerts the Base Station giving no detectable signs for those inside the vehicle itself.

CONNECTORS

FME	antenna GSM
SMB	antenna GPS
Molex 12 pins Microfit	inputs and power supply
Molex 12 pins Microfit	outputs
RJ 8 contacts	handset
RJ 4 contacts	microphone for handsfree and silent listening
RJ 4 contacts	loudspeaker
RJ 8 contacts	V28 mobile office
RJ 8 contacts	V28 satellite telephone link

INPUTS

Digital	3
Analogue or Digital	5
Digital or tachymetric	2

Digital inputs:	active low 0V; 15.6Vmax
Analogue inputs:	$0 \div 15.6$Vmax (programmable thresholds and timings)

OUTPUTS

8 outputs	Solid state switches
	I_{sink}: 1A ; active to ground

BACK-UP BATTERY

Type:	Lithium – Manganese
Capacity	1.3Ah
Duration	max 30min.

Examples of duration of back-up battery.

The following examples are purely and strictly indicative. Back-up battery life varies depending on configuration, that is according to the function mode selected for the mobile device. Moreover, it can vary in relation to whatever circumstances are co-occurring when the back-up battery is used.

Example A: GSM signal present, Base Station operator not available, mains power failure, GPS receiver always on   *greater than 1 hour*

Example B: no GSM signal found, mains power failure

greater than 30 minutes

CELLULAR PHONE

The cellular phone is built into the central unit
Cellular engine manufactured by Telital S.p.A.

STANDARD ACCESSORIES

5   GSM antenna (roof antenna as standard)
    active GPS antenna
    microphone and loudspeaker for handsfree
    fixing brackets
    screws and other mechanical small parts
10 Microfit female without wirings

ACCESSORIES AVAILABLE ON REQUEST:

I/O wirings

IMPORTANT! Sensors or any other parts for interfacing with the vehicle are not supplied

CUSTOMIZING FEATURES

15 On request, a number of modifications are possible in order to customize the look of the product, as indicated in the following list:
    - silkscreen printing on accessible surfaces as suitable for mobile device casing
    - silkscreen printing on the handset
    - wording appearing on handset's display when telephone is switched on

20 ## TECHNICAL DATA

Power supply: 10.8V - 15.6V

Consumption:
- max (all functions activated)   1.0A peak

- state: motionless and protected
25 (vehicle is motionless and system armed)   5mA max

- state: alarm
(alarm, telephone transmitting)   200mA mean

- stocking   (system off)   0A

Operating Temperature: -30°C - + 85°C
30 Storage Temperature: -40°C - + 85°C

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