SCE GLOBAL PTE LTD

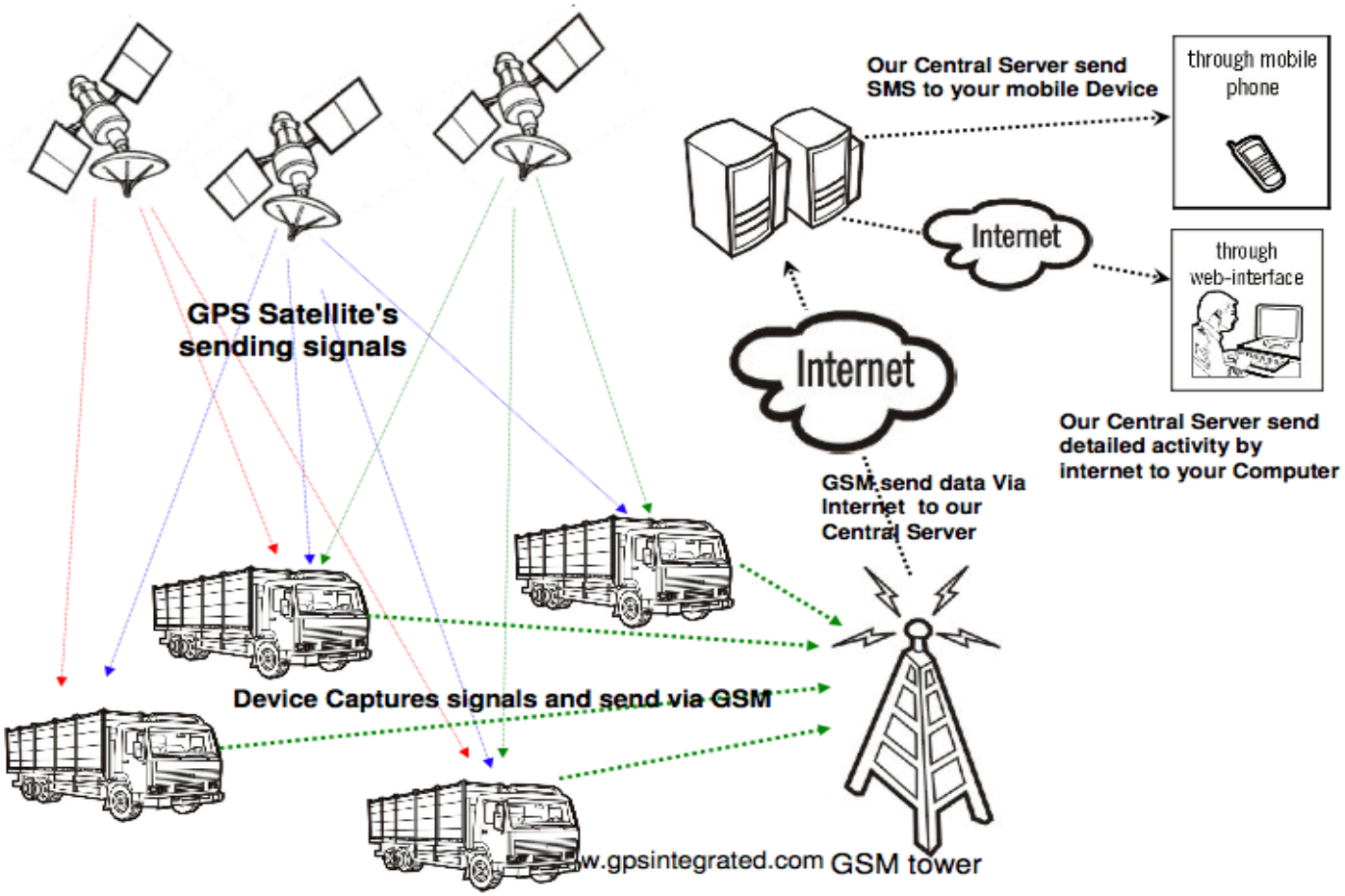
123 Genting Lane #05-05 Yenom Industrial Building Singapore 349574
Tel: (65) 67435210 Fax: (65) 67435291 Website : www.scesing.com

GPS Tracking Solution Division

World Leading Global Tracking Technology

Telecom Dealer's Licence No : DB105107 (Dealer Individual Licence)

How It Works?


Our Central Server send
SMS to your mobile Device
through mobile
phone
Internet
through
web-interface
GPS Satellite's
sending signals
Internet
Our Central Server send
detailed activity by
internet to your Computer
GSM send data Via
Internet to our
Central Server
Device Captures signals and send via GSM
w.gpsintegrated.com
GSM tower

SCE Global GPS Tracking Solution

When You Simply Need To Know...

Do you know where your vehicle(s) and drivers locations are at any given time?
When did your drivers/employees arrive at a jobsite or scheduled location?
What time did your employees start/end their shift?
How long did they take for lunch?
How long were they stopped at a particular location?
If your employees take your company vehicles home, are they doing any unauthorized driving?
Were your company vehicles excessively idling? If so, for how long?
Are your vehicles going to places your forbid?
Are your vehicles speeding?

The SCE Tracker Effectively Monitors & Records All Driver Activity.
You Will Be Able To View Live Vehicle Data, Historical Data, As Well As Run A Number Of Key Vehicle Reports That Will Leave No Question Unanswered...

SCE Global GPS Tracking Solution

Our Solution Offers Standard Features

Fleet Tracking
Monitor trips, stops and manage fleet activities to make smarter, quicker business decisions.
Reporting
Supplement vehicle tracking with reports that display the activities of individual vehicles and/or your entire fleet.
Customized Alerts
Configure specific vehicle activity alerts that adhere to the unique logic of your business.
Locations
Designate the schedule, job and customer locations that are unique and important to your fleet.
Mobile
Provide vehicle tracking and custom fleet activity alerts for your smart phone.
Routing
View driving histories and plan more efficient routes.
Administration
Role-based access to assign specific roles for different users and hide/show certain vehicle tracking features.

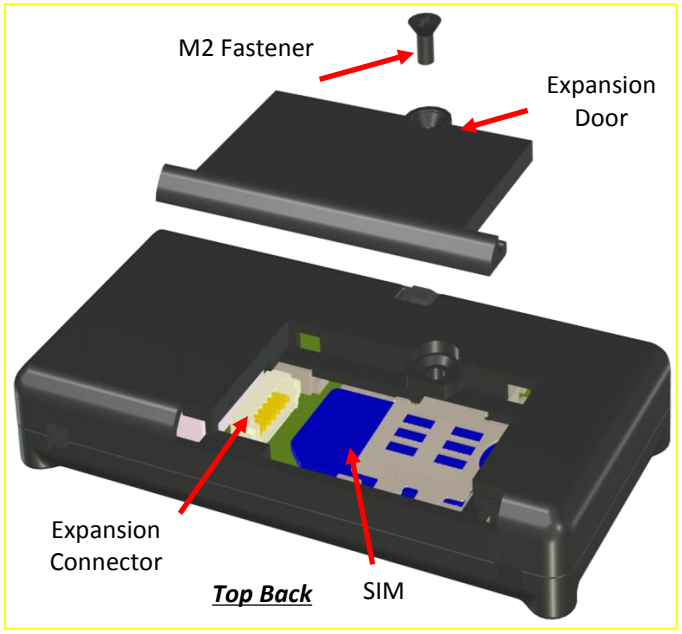
Benefits

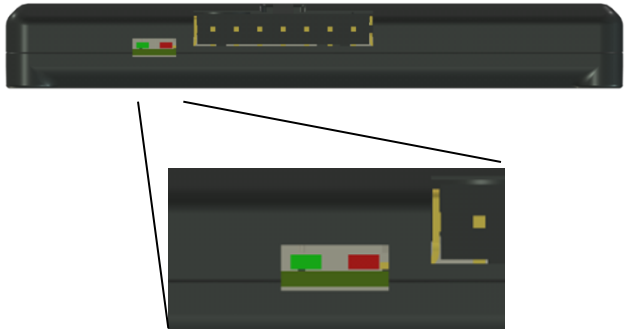
Transport Management Tool:
Now your Transport Manager can make decisions and not your drivers. It will Increases Driver productivity, Save fuel, Lower maintenance cost, More accurate scheduling and Better customer service

Mobile Employee Tracking :
Track Service people, Sales people while traveling outstation or at branch offices.

- Increased Driver Productivity
- Real-Time Dispatch Tool
- Reduced Fuel Expenses
- Improved Customer Service
- More Accurate Billing
- Validation of Service Calls
- Benefits of a Virtual Time-Clock
- Lower Insurance Costs
- Decreased Driver Speeding
- Decrease Overtime

SCE GPRS/GPS Module





LED	Status
Green	**On: GPS satellites acquired** Flash: 250ms/250ms duty cycle indicates GPS satellite search is in progress Off: GPS subsystem fault
Red	**On: GSM successfully registered with the assigned carrier** Flash: 250ms/250ms duty cycle indicates GSM network search is in progress Off: GSM subsystem fault

SCE GPRS/GPS Module

QUICK Notes

1. **SCE GPS/GSM Module**
    1. Model part number : ***IONML1G2***
    2. FCC ID: ***Y5BIONML1G2***
2. **Key Information**
    1. Data Transmission mainly by UDP, ***Data SIM*** Card
    2. Data Consumption is ***13 MB monthly*** based on
        1. 300byte/event x 1 min/event x 60 x 24hours x 30 days
    3. Data Programming
        1. USB-Serial Dongle
        2. OTA (Over the Air)
    4. Key Programming Parameters
        1. APN (Access Point Network) for Telcos on Pre-paid/Post-paid Data SIM Card
        2. Repetitive time of data transmission of GPS
    5. Operating Voltage Range
        1. Main $6V_{DC}$ – $15V_{DC}$
        2. Backup $2.8V_{DC}$ – $4.2V_{DC}$
    6. Startup time
        1. GSM – Initial 5 mins, normal 40 secs
        2. GPS – Initial 5 mins, normal 2 mins

GPRS/GPS Module

Product Specifications

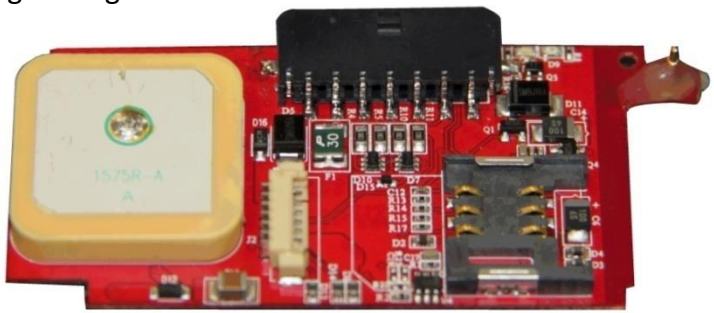
- GSM Quad Band 850/900/1800/1900 MHz
- GPRS Protocol CS-1, CS-2, CS-3 and CS-4
- Output power
  Class 4 (2W) @ 850/900MHz
  > 24dB @ 850/900MHz (OTA TRP)
  Class 1 (1W) @ 1800/1900MHz
  > 26.5dB @ 1800/1900MHz (OTA TRP)
- Power consumption
  VIN:
  6.0 – 15.0VDC (Main)
  2.8 – 4.2VDC (Expansion)

  Main

Shutdown:	< 2mA
Standby:	< 3mA(GSM Idle)
GPS acquisition:	<30mA(GSM Idle)
GPS tracking:	< 20mA(GSM Idle)
GSM max power:	< 250.0mA(GPS Off)
GPRS max power:	< 300.0mA(GPS Off)
Peak instantaneous:	< 740mA

  Exp: 2.45 x Main

- Sensitivity:
  < -107dBm @ 850/900MHz (Chip)
  < -101dBm @ 850/900MHz (OTA TIS)
  < -106dBm @ 1800/1900MHz (Chip)
  < -103.5dBm@1800/1900MHz (OTA TIS)
- AT commands
  GSM standard AT command
  V.25TER AT command
- Dimensions: 79.0mm x 38.0mm x 10.8mm
  (The Dimensions of module with a cover on it)
- Weight: 35 grams



GPRS/GPS Module

Environment

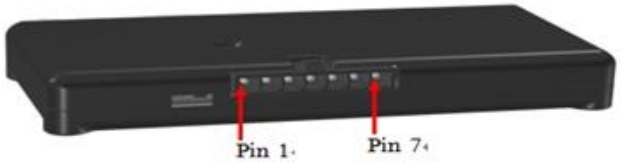
- Temperature:
  - 40 to + 85° C Operation
  - 50 to +100° C Storage
- Humidity:
  20% to 90% Operation
  10% to 95% Storage
- ESD:
  15KV immune on all user accessible surfaces and ports
- Altitude:
  -500 to +18,000m

Approvals

- FCC 47 CFR Part 15 and Part 18
- Industry Canada
- UL Listing
- PTCRB
- AT&T

Module Main Connector

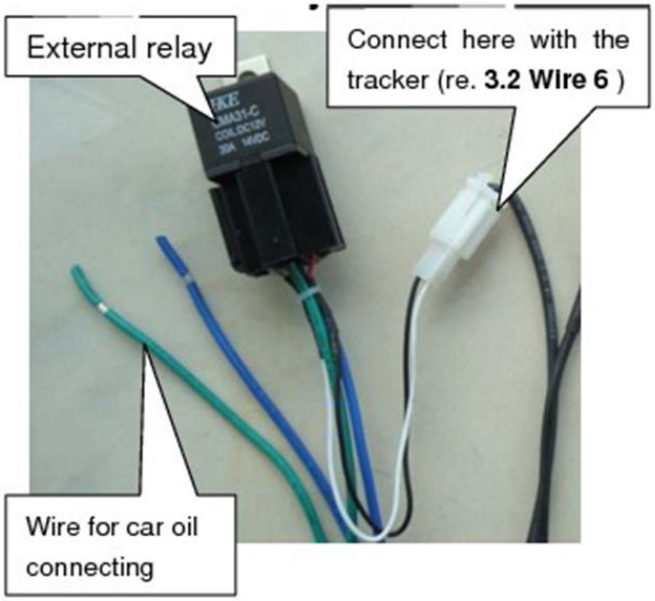
Figure 5
Main Connector

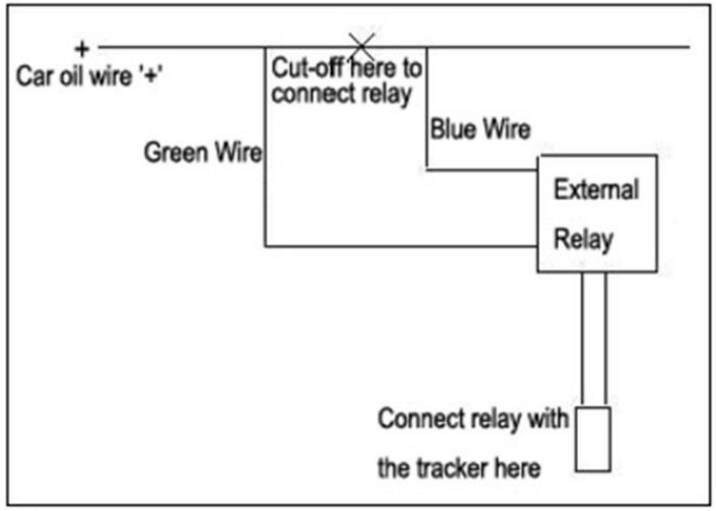


Main Signals			
Pin Number	Name	Description	**Properties**
1	RLY	Relay drive, connect relay coil between pin 6 and this pin	**500mA, 15V tolerance open drain MOSFEET, TVS overvoltage protected**
2	GP2	Configurable as general input or output	**2.8V logic level, 15V tolerance, equivalent circuit in NOTE**
3	GP1	Configurable as general input or output	**2.8V logic level, 15V tolerance, equivalent circuit in NOTE**
4	TX1	General UART TX output, also serves as debug serial out	**2.8V logic level, 15V tolerance, equivalent circuit in NOTE**
5	RX1	General UART RX input, also serves as debug serial in	**2.8V logic level, 15V tolerance, equivalent circuit in NOTE**
6	VIN	Power input, connect to positive side of battery power	**750mA PTC inline self resetting fuse, also clamped to GND through 26V hold TVS diode**
7	**GND**	**System ground, connect to negative of battery power**	**Power and signal ground point**

External Relay Connection (Engine Immobilize)

External relay Connection

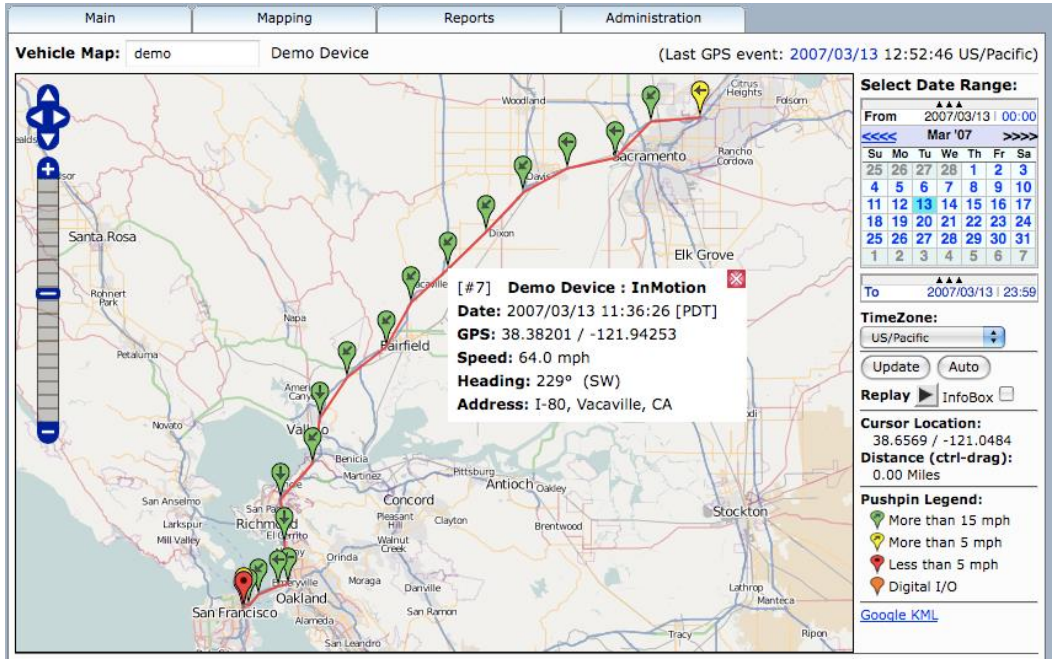




Software Customization

TheyWhere™ Service

The SCE Global™ TheyWhere™ enterprise platform is a professional global tracking solution. TheyWhere™ monitors, maintains and manages vehicles and other mobile assets as well as provides personal location services. TheyWhere™ integrates features that apply to car security and fleet management. It generates individual and group reports for fleet owners and service providers. This ready-to-use and cost effective online tracking software is truly an ideal tracking solution for business owners, system integrators and service providers. SCE Global™ can quickly customize TheyWhere™ to specific customer requirements.

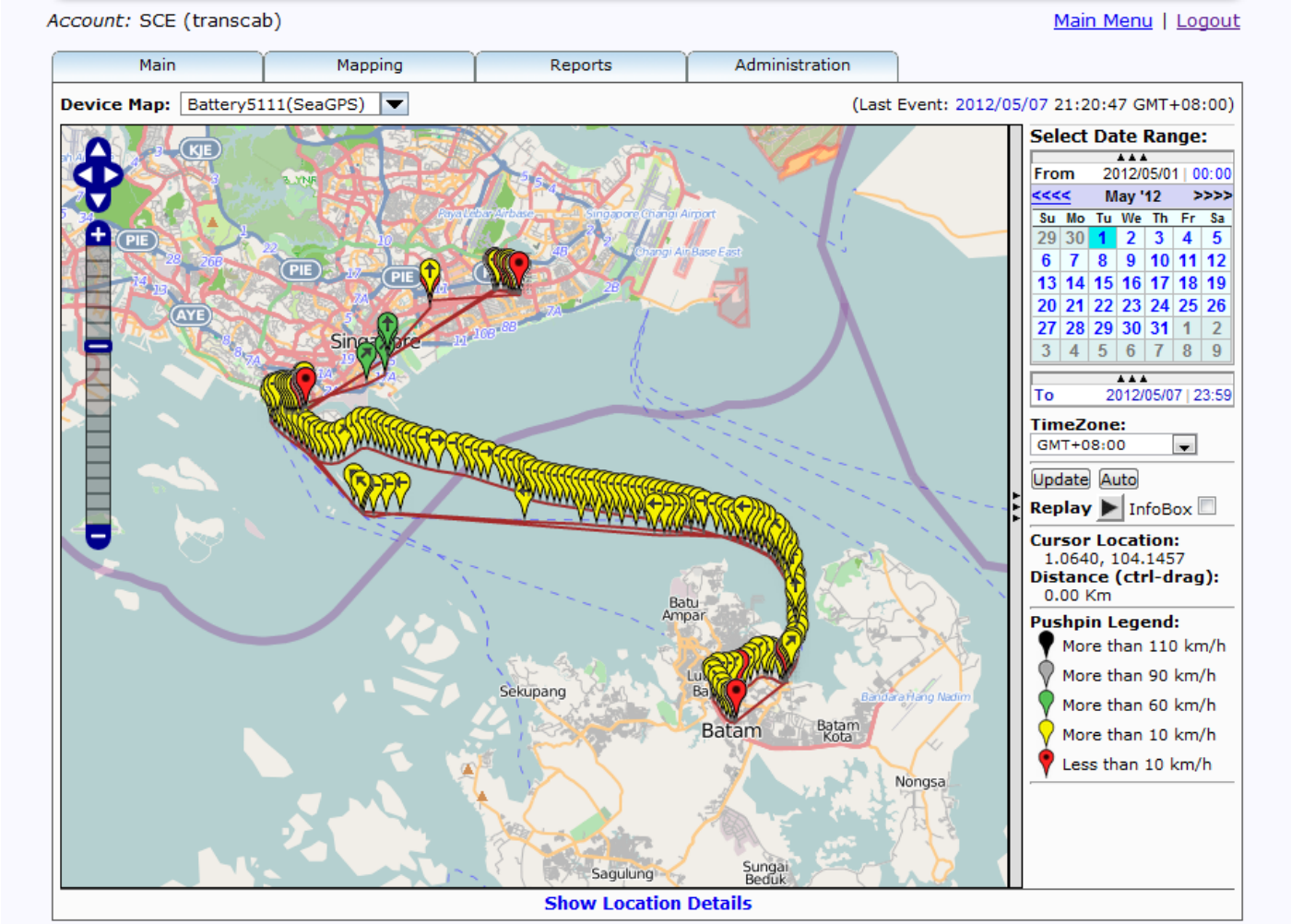


Reference Maps

OpenStreetMap

Google Maps

Sample Map


Account: SCE (transcab)
Main Menu | Logout
Main
Mapping
Reports
Administration
Device Map: Battery5111(SeaGPS)
(Last Event: 2012/05/07 21:20:47 GMT+08:00)
Select Date Range:
From 2012/05/01 00:00
<<<< May '12 >>>>
Su Mo Tu We Th Fr Sa
29 30 1 2 3 4 5
6 7 8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31 1 2
3 4 5 6 7 8 9
To 2012/05/07 23:59
TimeZone:
GMT+08:00
Update
Auto
Replay
InfoBox
Cursor Location:
1.0640, 104.1457
Distance (ctrl-drag):
0.00 Km
Pushpin Legend:
More than 110 km/h
More than 90 km/h
More than 60 km/h
More than 10 km/h
Less than 10 km/h
Batu Ampar
Sekupang
Batam
Batam Kota
Nongsa
Sagulung
Sungai Beduk
Show Location Details

Software Customization

Featured Functions of TheyWhere™

- ✓ **Real Time Tracking**: Automatically update real-time GPS location data; store history records for data search; display of GPS location data on maps with path trails
- ✓ **Alarm (Event) Forwarding**: Numerous status alerts for different events such as geo fencing, panic alert, and alarm outputs; forwarding of alarm events via email or SMS (option) to multiple recipients.
- ✓ **Control Function**: Send commands to devices via the Internet (GPRS) or SMS, such as disable engine, open car door, and request location
- ✓ **Admin**: Edit user accounts and monitor tracking devices on one screen; send commands to multiple devices for security/fleet management.
- ✓ **Geo Fencing**: Set up multiple points and areas on a map with adjustable radii; send alert messages via email or SMS (option) while entering or leaving restricted zones
- ✓ **Reverse Geo-Coding**: Translate Location and custom messages from longitude and latitude into a street address and sent to a preset map / cell phone number (option)
- ✓ ***Multi-Trac*k**: Monitor All tracking devices on one screen; an administrator can manage all devices and provide services to end customers in real time on this screen

We use Singtel M2M Data SIM Card

Machine to Machine Application for Logistics and Transportation

With superior coverage in Asia, SingTel M2M offers you real-time control over costs and fleet in half the time.

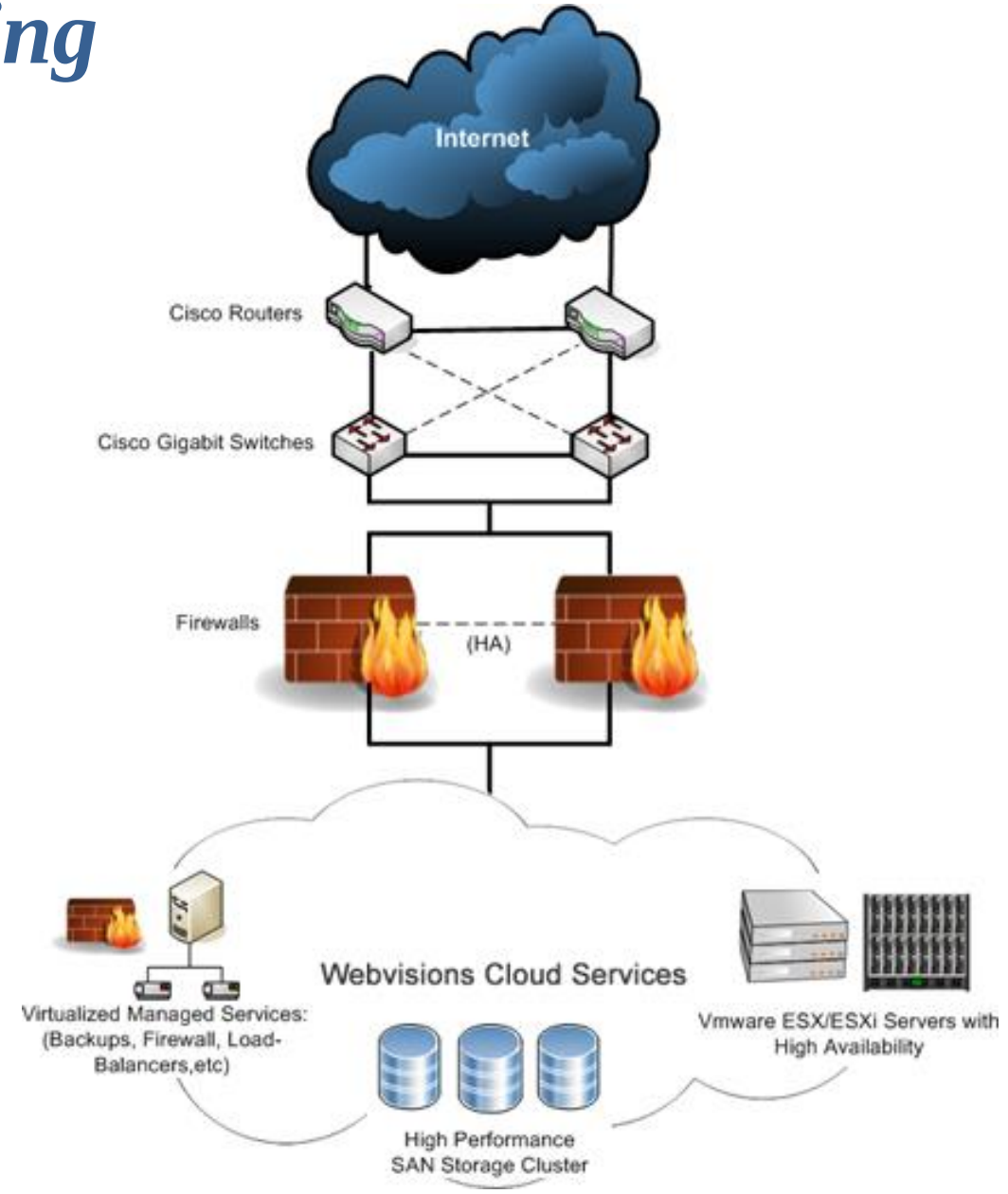
The use of M2M for transport operations and logistics tracking is fast becoming a necessary component for companies to stay ahead through real-time control over resources and freight movements.

Smart devices are being used in fleet management to gain greater visibility and control over businesses. Machine to machine (M2M) applications enable the tracking of vehicles and cargo containers to collect data on locations, driving speeds, fuel consumption, temperature and humidity, delivery progress and more to ensure more efficient logistics management and goods delivery. With more digested information and greater control, better resource management, operations and cost efficiency are eminently possible, delivering a competitive edge to businesses utilising M2M technology.

Our Hosting

ICONZ-WEBVISIONS
smarter · sharper · safer

webvisions



Quality Assurance

Our products have been approved by International FCC and PTCRB organizations .
Some of the certificates and test reports are as follows:

telefication

TCB GRANT OF EQUIPMENT AUTHORIZATION TCB

Certification
Issued Under the Authority of the
Federal Communications Commission
By:

Telefication B.V.
Edisonstraat 12a
Zevenaar, 6902 PK
Netherlands

Date of Grant: 01/17/2011
Application Dated: 01/11/2011

IONIT Global Inc.
No.123 Qinjiang Rd.
Shanghai, 200233, China
Attention: Hao Xu , TS Manager

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: Y5BIONML1G2
Name of Grantee: IONIT Global Inc.
Equipment Class: PCS Licensed Transmitter
Notes: GPRS Module with Intergrated GPS
Modular Type: Single Modular

Grant Notes	FCC Rule Parts	Frequency Range (MHZ)	Output Watts	Frequency Tolerance	Emission Designator
	22H	824.2 - 848.8	0.27	0.1 PM	260KGXW
	24E	1850.2 - 1909.8	0.52	0.1 PM	255KGXW

Power Output is ERP for Part 22 and EIRP for part 24. The antenna(s) used for this transmitter must be used to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. This grant is valid only when the module is sold to OEM integrators and must be installed by the OEM or OEM integrators. End-users may not be provided with the module installation instructions. OEM integrators and end-users must be provided with transmitter operating conditions for satisfying RF exposure compliance.

This device contains functions that are not operational in U.S. Territories.

Certificate No: 11218005/AA/00	W.J.M. Jong Operations Manager Certification	i.o. BJ

laboratory certification approvals

CETECOM

GSM
(Global System for Mobile Communications)
PARTIAL TEST REPORT

Number: SH_GT_304971 - Date: 2011-09-27

according to
NAPRD03 (v5.8)
for

IONIT Global
User Equipment Type:
IONML1G2

Final Hardware Version: 1.00
Final Software Version: 1.00

supporting the following technologies:
GSM 850/1900

This test report consists of 13 pages and the following annexes:

Annex A - Accreditation Certificate	2 pages
Annex B - Test Equipment	6 pages
Annex C - PICS/PIXIT Information	47 pages
Annex D - Photographs	2 pages
Annex E - Detailed Test Verdicts	84 pages

CETECOM Shanghai is accredited according to DIN EN ISO/IEC 17025 by: DAkkS D-PL-12099-01-01

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Building 3,No.1500, Zuchongzhi Road • 201203 Shanghai • China
Phone: +86 (0) 21 6879 6360 • Fax: +86 (0) 21 6879 6708 • E-mail: info@cetecom.cn • http://www.cetecom.com
Registered in Pudong/Shanghai, China, Reg.-No.: 310115400213689
Board of Directors: Dr. Harald Assenga, Hans Peter May (chairman)

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Quality Assurance

Report No.:SZ12060066E01

CE EMC TEST REPORT

Issued to

IONIT Global Inc.

For

GPRS Module with Integrated GPS

Model Name:	IONML 1G2
Trade Name:	ION 1 Module
Brand Name:	IONIT Global
Standard:	ETSI EN 301 489-1 V1.9.2 (2011-09)
	ETSI EN 301 489-7 V1.3.1 (2005-11)
Test date:	July 3, 2012 – July 23, 2012
Issue date:	July 23, 2012

Shenzhen Morlab Communications Technology Co., Ltd.

Tested by Xiao Xiong — Date 2012.7.23

Approved by Wei Yanqun — Date

Review by Huang Pulong — Date 2012.7.23

Report No.:SZ10110149W01

OTA performance

TEST REPORT

Issued to

IONIT Global Inc.
No.123Qinjang Rd. shanghai, P. R. China

For

GPRS Module with Integrated GPS

Model Name:	IONML1G2
Trade Name:	ION 1 Module
Brand Name:	IONIT Global
Test Rule:	Test plan for Mobile Station Over the Air Performance
Test date:	August 12, 2011

by

Shenzhen Morlab Communications Technology Co., Ltd.

Tested by Wang Guoqiang — Date 2011.08.12

Approved by — Date

Review by Mo Huina — Date 2011.8.12

IEEE 1725 OTA · OFTA · TAF · GCF · Bluetooth BQTF · FCC Reg. No. 741109

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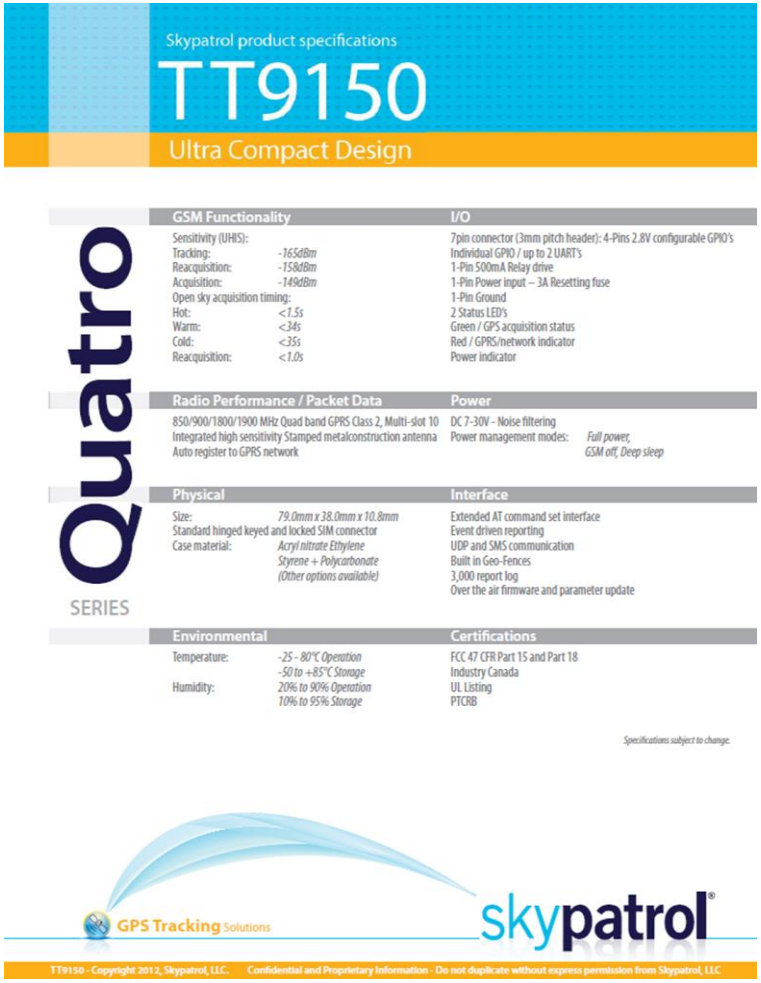
Shenzhen MORLAB Communication Technology Co., Ltd. Tel: +86 755 61281201 Fax: +86 755 88130218
3/F, Electronic Testing Building, Shahe Road, Xili,Nanshan District, Shenzhen, 518055 P. R. China

Our Customers in USA



Our Customers in USA

Our Customers in USA

STAR SENSOR TECHNOLOGY
Analytics Technology Group

Quest TRACKING SYSTEMS

Star Sensor Technology LLC, has announced in May 2012 that is has reached an agreement to acquire ***Quest Tracking Systems***, a leading distributor of GPS Tracking products and services offered to a broad range of customers in the United States
Quest Tracking Systems LLC, has long been the leading GPS Tracking supplier in the Southeast, a region which Star Sensor Technology has been reaching new levels of success. With this broader geographic reach, Star Sensor Technology emerges as a compelling option for multi-location customers around the country. While the newly formed company will "think national," the expanded team of sales professionals based throughout the U.S will continue to "act local", providing their customers with unparalleled service.

The built-in advantages are many. For example, the small size allows for easy placement without risk of damage due to an internal antenna. Also, the low power consumption and super-sensitive GPS detection makes for an efficient device.

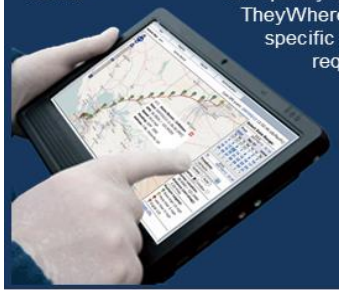
QTrax is a sleek and self-contained, commercial grade tracking device that combines GPS satellite location with a quad band GSM/GPRS connectivity. The QTrax is optimized for reliability, cost, and size. It can be queried, updated, and configured through a serial connection or OTA via the GSM/GPRS connection.

SCE GLOBAL PTE LTD

SCE GLOBAL is a unique turnkey product and system solution provider for the M2M space. SCE GLOBAL provides international technical product and market insights to their customers and supplies them with innovative and unique turnkey hardware, software and data management solutions for GPS and cellular asset tracking, wide band global communications and system controls.

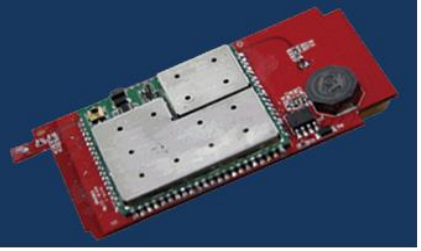
TheyWhere™ Service

The SCE Global™ TheyWhere™ enterprise platform is a professional global tracking solution. TheyWhere™ monitors, maintains and manages vehicles and other mobile assets as well as provides personal location services. TheyWhere™ integrates features that apply to car security and fleet management. It generates individual and group reports for fleet owners and service providers. This ready-to-use and cost effective online tracking software is truly an ideal tracking solution for business owners, system integrators and service providers. SCE Global™ can quickly customize TheyWhere™ to specific customer requirements.

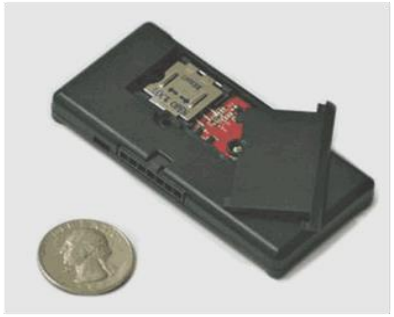


GPRS/GPS Module

The IONL1G2 module is a self contained, expandable, integrated commercial grade vehicle tracking module that uses GPS satellite location in combination with a quad band GSM/GPRS cellular radio connection to report that location. All antennas including the GPS patch and GSM antenna are internal to the device. Data reporting can be initiated by a command center or by the tracker itself via GSM CSD, SMS or UDP. The IONL1G2 module provides GSM mobile communication capability and suitable for embedding in some wireless products, such as wireless modem, PDAs and other devices. In addition, The IONL1G2 module has an embedded Powerful TCP/IP protocol stack, and it allows you access to the Internet easier and convenient.



SCE Global



Product Features

850/900/1800/1900 MHz Quad band
Output power
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- > 24dB @ 850/900MHz (OTA TRP)
- Class 1 (1W) @ 1800/1900MHz
- > 26.5dB @ 1800/1900MHz (OTA TRP)

AT commands
- GSM standard AT command
- V.25TER AT command

Power consumption
VIN:
- 6.0 – 15.0VDC (Main)
- 2.8 – 4.2VDC (Expansion)

Main

Shutdown:	< 1mA
Standby:	< 3mA(GSM Idle)
GPS acquisition:	<30mA(GSM Idle)
GPS tracking:	< 20mA(GSM Idle)
GSM max power:	< 250.0mA(GPS Off)
GPRS max power:	< 300.0mA(GPS Off)
Peak instantaneous:	< 740mA

Sensitivity:
- < -107dBm @ 850/900MHz (Chip)
- < -102dBm @ 850/900MHz (OTA TIS)
- < -106dBm @ 1800/1900MHz (Chip)
- < -103.5dBm@1800/1900MHz (OTA TIS)

Dimensions: 79.0mm x 38.0mm x 10.8mm
(The Dimensions of module with a cover on it)

OTA(Over-The-Air)
OTA (Over-The-Air) is a technology used to communicate with, update applications automatically to, and manage firmware without being connected physically to the device.

Quality Assurance

Our products have been approved by International FCC and PTCRB organizations

SCE Global Pte Ltd
GPS Tracking Solution Division

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Singapore 349574
Tel: (65) 6743 5210
Fax: (65) 6743 5291
http://www.scesing.com
ionitsales@scesing.com

Reference
- Vehicle Tracking
- Company Branded Tracking Devices
- GPS/GSM Integrated Module Component
- Personal Tracking
- Long Terms Unattached Asset Tracking

Our Contact

For more information call us at :

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Tel No : +65 - 6743 5210
Fax No : +65 - 6743 5291

Website: www.scesing.com