HELIOS

› real-time
fleet management
and security

STARCOM
GPS Global Solutions

Helios
"the Ruler of the Sun, believed to be the "All-Seeing
.according to early Greek mythology -

STARCOM
GPS Global Solutions

| Eye in the Sky |

The most sophisticated unit for real-time fleet management and .security applications

The comedian Sid Caesar once said: "The guy who invented the first wheel was a fool. The guy who invented the "!other three, he was a genius

We at Starcom Systems didn't invent the vehicle location system. We invented the "other three wheels" that .totally changed the world of vehicle location and raised it to perfection

:Our products are fully adjusted to every need

They are fully customized to alert any type and combination of events, they enable automatic operation, and maintain stability and continuity. It is the only system that provides solutions to every conceivable need. The advanced wisdom of Helios enables us to offer you the useful information in a very practical and user-friendly .way, that even the most complicated analysis automatically becomes simple and easy to use

:By using Helios products

You enjoy the easy and convenient use

of the system, due to its all-in-one solution base; its easy and simple installation; its integration with the local surroundings of the car or motorcycle; its flexibility to local needs; its compact size that includes built in antennas; its infinite applications; and its .opportunities to broaden its future applications

You maintain stability

due to the state of the art OTA (over the air) ability to remotely upgrade the unit with new features and change settings within the existing firmware of the unit. Thereby, there is constant communication with the car or motorcycle even in the event of a .malfunction

You save

time and money because of the possibility to define different frequencies of transmission according to the .local broadcast or Roaming

You can take advantage

of the high quality of the system which complies with .the Automotive industry standards

You are in control

of every possible circumstance or situation. The open system and its platform allow integration of every .situation, both simple and complicated

:For example

You can define a request to change the broadcasting frequency automatically once the car enters a specific .area and the door is opened

You are confident

that in the event of an unusual situation the system .will automatically be activated

:For example

At the time of an accident, the system will automatically unlock the doors and beep every pre-set amount of minutes to identify the location of the car or .motorcycle

General Specification

CPU	Type :Memory	NXP ARM Cortex-M3 Static RAM: 128kb ROM: 34kb Flash: 2048kb
Power	Voltage Range Consumption	(8V – 28V (supported in same unit 3mA in low power mode up to 120mA in working mode can reach up to 300mA if battery is charged
(Backup Battery (optional *	Type Power	Lithium-ion Polymer 3.75V, Helios Advanced Plus: 950 mAh / Helios TT: 550 mAh
GPRS - Cellular Modem Satellite Modem (external device) Data Messages	GSM Antenna type Network Channels Connection SMS GPRS	.(Quad Band (850, 900, 1800, 1900 (Built in (concealed (GSM, CDMA, HSDPA, SMS, 3G (optional RS232 Encrypted Protocol TCP/IP
Location	Type (Time to First Fix (TTFF Positioning Accuracy Antenna type	(GPS, GLONASS (optional (sec (hot start 2 (10m CEP (50% (Velocity: 0.2m/s (50% (Built in (concealed
COMM Port	Type Speed	RS232 (115,200bps (default
I/Os (check per model)	Digital Inputs Digital Outputs Analog Inputs Pulses Counter CANBus	Helios Advanced Plus: Max 8/ Helios TT: Max 2 Helios Advanced Plus: Max 4/ Helios TT: Max 1 Helios Advanced Plus: Max 3/ Helios TT: Max 1 (Max 1 (Helios Advanced Plus only (Included (Helios Advanced Plus only
Accelerometer	Type Purpose	3-Axis, 20 mg accuracy, up to 8g Identify and report events of impact and accident
Alarm System	Immobilizer Disarming Options	External – Gradual Stop Key Pad, Dallas Key, Remote Control, RF Keypad
Dimensions	Size Weight	(Helios Advanced Plus: 21H x 60W x 107L (mm (0.82H x 2.36W x 4.21L (inch (Helios TT: 21H x 60W x 57L (mm (0.82H x 2.36W x 2.24L (inch (Helios Advanced Plus: 150 (grams) 5.29 (Oz (Helios TT: 120 (grams) 4.23 (Oz
Environmental	Operating Temp Storage Temp Humidity	(-40°C (-40°F) - 60°C (140°F (-40°C (-40°F) - 85°C (185°F Max 90%

Key Features

Fleet

Programmable Events: Events can be defined to both transmit and act on complex events. For example – activating the horn and transmitting when a tanker truck activates its engine while unloading fuel at the fuel .depot

Speed restrictions: Programmable alerts whenever the vehicle goes above/ below a pre-defined speed, to .detect over hastiness and unauthorized stops
Mileage: Ability to alert every specific number of .kilometers

Curve detection: Support for transmitting at every turn, .for better route visualization
Motor is running while stationary: Alert when the motor is running and the vehicle is left stationary at a .specified time range

Perimeter based alerts: Geo-fencing alerts when a vehicle is entering/ leaving a specified area at a .specified time

Values Monitoring: Monitoring of analog inputs to alert .when voltage/ temperature are exceeding

Driver Identification: By using different Dallas iButton, Remote Controls, Keypad or RF Keypad Codes, the unit .sends the code of the current vehicle driver to the center
Mileage Transmissions: Periodic mileage transmissions .for the needed vehicle's maintenance

Automated Tracking: Automatic support for vehicle tracking at specified times, without sending additional .commands to the vehicle

Alarm System

Complete Security System: Complete operational security system with different logic states to detect break-ins and report to the center

Times Programming: Complete control over the alarm system timing (the intervals at which the unit stays at each of the alarm system logic modes

Wakeup from accelerometer: the unit can wake up

Towing Detection: GPS-based detection of movement while the system is armed, produces a towing alert to the center. Helios TT can also detect a tow alert by recording the cellular antennas in its vicinity

Low Power Warning: Warning transmission whenever the vehicle's main power goes below a predefined threshold

Disarming Devices: Four disarming devices are 4 available, including keypad and RF Keypad, remote control, and Dallas iButton

Gradual Stop: Option to gradually stop the vehicle by .sending pulses to the immobilizer or fuel pump

Vehicle and Driver Protection

Emergency Button: Support for emergency button to invoke an immediate high-priority transmission to the center

Accident and Harsh Braking Detector: Built-in accelerometer serves as both accident and a harsh braking detector

Auto Lock: Support for locking/unlocking the doors .whenever the motor is starting/stopping

Inputs/Outputs

Digital Inputs: Helios Advanced Plus: Eight digital inputs, usually used for Ignition, Emergency, Doors, Arming, and Disarming / Helios TT: Two digital inputs

Pulse Counter Input: To measure odometer pulses, or 1 any sort of pulses generated by external devices. (Helios Advanced Plus only

Analog Inputs: Helios Advanced Plus: Three analog inputs, each can be set to work in two different measurement scales. Example: usages are external temperature sensors or fuel measurement without a need for external sensor / Helios TT: One analog input is optional (one digital input can be used as an analog

Main power indication: A main power measurement to indicate the vehicle's battery voltage

Canbus connection: Direct connection to the vehicle's computer using the CANBus protocol. (Helios Advanced Plus only

Odometer Support: Support for digital odometer to read its pulses and calculate the vehicle's mileage. (Helios Advanced Plus only

Digital Outputs: Helios Advanced Plus: Four digital outputs, usually used for Lock, Unlock, Siren, and Immobilizer / Helios TT: One digital output

Pulses Width Modification: Ability to set the width .and number of the lock and unlock pulses

Communication

Cellular Connectivity: Support for GSM networks (GPRS or optional 3G), while using both the SMS channel and the data channel. Supported bands are 850/900/1800/1900 MHz. Optional support for CDMA, HSDPA networks

Satellite Connectivity: Using an external device, an Iridium connection may be used when out of cellular coverage

TCP Connectivity: Support for the GPRS/1x TCP/IP networks by either staying online at all times, or coming online when a transmission is initiated

DNS Support: Connection to a server by its host name

Backup Server: Backup host name support in case of main server has gone offline

Encryption: Protocol encryption to provide maximum security between the vehicle and the center

External Protocol Support: Support for external devices for 3rd party protocols, such as text terminal or RFID readers

Navigation Support: Support for external devices for navigation, such as handheld or laptop computers

Anti-jamming: Support for a gradual stop of the vehicle if a theft transmission has failed due to communication frequencies jamming

Compact Protocol: Less than 70 bytes per message enables very small bandwidth usage and saved communication costs

Voice Calls: Hands-free kit to support voice call from and to the vehicle. Ability to initiate a voice call from the .unit without the knowledge of the driver

Over-The-Air commands

Firmware Upgrade: Over the air firmware upgrade to apply new features to already-installed units

Status Requests: Ability to request the latest status of the vehicle, and receive the entire information about all the inputs, outputs, and location information

Tracking: Option to remotely engage periodic transmissions from the unit at intervals of 10 seconds to 5 days

Tracking Interval By Channel: Different transmissions intervals can be set to each communication channel used –SMS/GPRS/Roaming

Parameters Programming: Complete programming of each and every one of the unit's parameters over the air

Remote Arm/Disarm: Option to arm or disarm the vehicle from the center

Output State Changing: Option to remotely activate/ deactivate different outputs, such as locking/unlocking the doors, starting/ stopping the siren, activating/ deactivating the immobilizer

Learn Dallas/Remote Control: Remote activation of extra Dallas iButton and Remote Control

Mileage setting: Remote update to synchronize the unit and the vehicle internal mileage counter

Voice Call Request: Request the unit to call a specific number for a voice call to communicate with the driver .and/or hear the activity inside the vehicle

Text Messaging: Send a text message to the vehicle's .text terminal

Miscellaneous

Garage Mode: Special condition in which the alarm system is turned off and no emergency transmissions are sent. This condition is time-limited

Internal Logging: Whenever a transmission has failed to be sent, the entire message is saved to the memory for later transmission. 15 thousand complete messages, including statuses, can be recorded this way

Low Power Mode: Option to switch to a low power mode (up to 3mA) whenever the alarm system is armed. .Best used for motorcycles

Fully Certified: Fully certified and complies with the highest standards of the automotive industry

Waterproof (IP67): A silicon case that gives maximum protection from water and extreme weather .(conditions is available (Helios TT only

Location

GPS Receiver: Built in GPS receiver allows real-time tracking and on-board location-based analysis

Mileage by GPS: Advanced algorithm to calculate the vehicle's mileage based on the GPS, without the need for any external connections to the vehicle's odometer

Last Location Saving: Saving of the vehicle's last .position, in case of going out of GPS coverage

:Choose the Helios that suits your needs

	Helios Advanced Plus	Helios Hybrid	Helios TT
GPS	+	+	+
GSM	+ (optional 3G, HSDPA and CDMA)	+ (optional 3G, HSDPA and CDMA)	+
Satellite Connectivity	-	+	-
Connector	pins Molex 24	pins Molex 24	pins Molex 10
Accelerometer	+	+	+
Canbus	+	+	-
Usage	.Full fleet and security features Can be used as standalone alarm system	.Full fleet and security features Can be used as standalone alarm system	Track & Trace
Advantage	Additional inputs/outputs - Built-in accident and harsh braking detection -	Constant communication - around the world, even when out of cellular coverage Additional inputs/outputs - Built-in accident and harsh - braking detection	Low cost - (Waterproof IP67 (optional - Allows a tow detection - with very low power consumption
I/O	Digital inputs 8 Analog inputs 3 Digital outputs 4 pulses counter 1 RS232 Canbus Hands free input* iButton/Keypad/RF Keypad/remote control input	Digital inputs 8 Analog inputs 3 Digital outputs 4 pulses counter 1 RS232 Canbus Hands free input* iButton/Keypad/RF Keypad/ remote control input	Digital Inputs (one digital 2 input can be used as an .(Analog input Digital output 1 Comm Port 1

Starcom GPS Global Solutions Ltd

Starcom GPS Global Solutions Ltd /SGS) is a leading global company, specializing in advanced automated real-time systems for remote tracking and management of vehicles, containers, assets and people. All .systems are characterized in strength, stability and continuous performance

Starcom GPS Global Solutions Ltd provide a complete solution, consisting of innovative equipment and unique software. Thanks to the user-friendliness of the system, it provides useful and effective solutions, .based on each user's settings and requirements

With more than 15 years of experience and expertise, Starcom GPS Global Solutions Ltd distributes and sells its products through technology partners and independent operators in more than 14 countries, and its application operates in 32 languages. As a global company, Starcom GPS Global Solutions Ltd' products include certifications from all the leading standards in the world, including E 24 certification, .Safety certification, EMC test certification, Tuv-Rheinland certification and more

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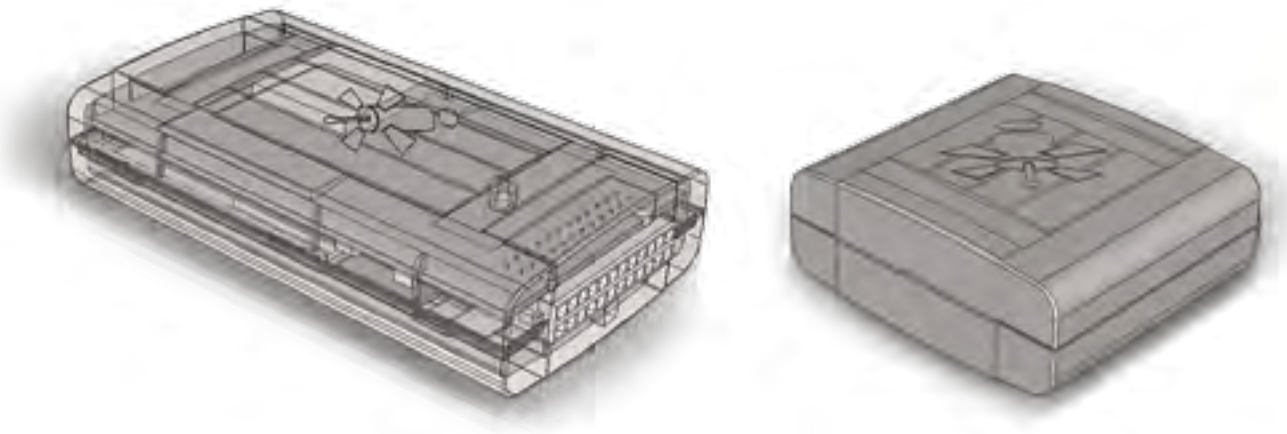

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