

MOBILE HUB SERIES : MHUB 918H



MHub

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The MHub 918H is a Fleet Telematics unit suited to sophisticated power users of Fleet Management solutions incorporating a hybrid communication platform of GSM/GPRS with Iridium satellite. The device boasts a wide array of functionalities including distribution management, vehicle maintenance and utilization, comprehensive accident reconstruction, communication with back office platform (Routing & Scheduling, WMS, ERP) and POD systems, etc.



The MHub 918H forms part of the MHub Fleet Telematics range designed to address many of the operational challenges prevalent amongst the commercial fleets. These include basic activity monitoring, reduction of operating costs, and enhancing the management of the Supply Chain.

The MHub has been deployed around the globe across a variety of industries such as logistics, utilities, insurance, telecoms, public transport and emergency vehicles.

FEATURES

Automatic Vehicle Location [AVL]

Using its onboard Global Positioning System (GPS) receiver the MHub provides accurate location information. Additional information includes trip data, driver identification, input status, output control, speeding and odometer.

Driver Management

Active monitoring of abusive driver behaviour. Monitored parameters include excessive idle, harsh braking, excessive acceleration, speeding, over-revving and free wheeling. The analyzed information provides the operator with a valuable tool to minimize fuel and maintenance costs while maximizing safety.

Zone Management

Monitoring entry and exit from user defined geographical areas (referred to as geofences). The downloaded Geofences can be categorized (i.e. customers, fuel stations, depots, etc.,) and linked to user defined actions. An example would be the unlocking of the cargo doors on entering a customer location.

Distribution Management

Scheduled delivery plans are downloaded to the MHub. The MHub monitors the execution of the delivery plan and reports action vs. planned. This feature has been designed to facilitate integration with 3rd party routing and optimisation platforms, providing the operators with real time delivery execution analysis. The data can be further utilized to dynamically resolve delivery problems, and to further optimize

future delivery schedules.

Accident Reconstruction

The MHub logs relevant vehicle data encompassing location, speed, direction and harsh braking on a second-by-second basis. On detecting an impact, the device automatically transmits the accident log to a centralised platform, providing the operator with an on-line accident notification and a reconstruction log of the events leading to the accident.

Power Modes

Using the latest technologies, the MHub has the ability to intelligently switch between various power modes subject to its detected ignition status. The device can reduce its power consumption to levels well below industry standards, allowing a vehicle to be utilized for weeks, while not excessively draining the vehicle battery.

Satellite Hybrid Communications

A hybrid satellite and GSM communication platform. This provides data communication redundancy in remote areas ensuring "Always Available" communication. Using Scope's Least Cost Routing engine, the operator can, maintain cost efficiency by limiting the satellite communications instances to high priority events in areas with no GSM coverage.

Temperature Monitoring

Temperature monitoring of refrigeration compartments utilising digital

temperature sensors with a range of -20C° to +120C°. Refrigeration operating limits are individually set for each sensor. The MHub reports periodical temperature readings as well as alerts to any readings outside the defined range.

Least Cost Routing

Utilizing a proprietary intelligent messaging engine, the MHub selects the least cost data transmission bearer based on user defined parameters of location (i.e. roaming status), data priority and availability of communication bearers. An example would be the switching of the communication method from GPRS to Iridium for high priority events when no GSM coverage is not available, while storing all the low priority unsent data and resuming transmission via GPRS of the low priority data when returning to the home network.

M-link

Provision of internet access to 3rd party devices (i.e. laptops, PDA's, etc.) connecting via the MHub. Access is provided for a user defined time period.

In Vehicle Networks

Interface to the standard J1939 or FMS Specification vehicle networks. The vehicle data provided includes essential information such as odometer, trip distance, fuel tank level, fuel consumption, water temperature, oil pressure, axle load, engine hours, and TCO data.

Mobile Resource Identification

Drivers and any other accompanied mobile workforce can be uniquely identified and matched with a user defined activity profile (APF). For example a driver's APF can be limited to specific days of the week, times of the day, and location. On identification of the driver the MHub will determine whether a given driver may be allowed to use the vehicle based on the allocated APF. All events relating to the vehicle usage shall be associated with the authenticated driver.

PDA Interface

Communication and data file transfers (i.e. invoices, routes, EPOD files, etc.) between the PDA and back office platforms are facilitated via the MHub ensuring a reliable means of data synchronisation. Interface between the PDA and the MHub is provided via an easily integrated API.

Dynamic Trigger Configuration (DTC)

Utilizing an intelligent proprietary Dynamic Trigger Configuration (DTC) engine, any user defined event and an associated action can be configured and applied to the MHub unit over the air, providing an easily adaptable platform to dynamically changing requirements.

Onboard Navigation Assistance

Real time (GPS) data is channelled to 3rd party navigation systems.

TECHNICAL SPECIFICATIONS

Physical Characteristics	
Dimensions:	Length: 89 mm Width: 121 mm Height: 35 mm
Inputs / Outputs	
Digital Inputs:	6
Frequency inputs:	2
Digital Outputs:	4
Serial Ports:	1
Power	
Power Input:	10V – 40V DC
Power Consumption	
Full Power Mode:	80ma
Low Power Mode:	35ma
Deep Sleep Mode:	<3ma
Environment	
Operating Temperature:	60°C
Humidity:	90% non-condensing
Communications	
Cellular Platform:	GSM/GPRS 900/1800/1900 MHz
Satellite Option	Iridium Short Burst Data
Regulatory	Vehicle Device Directive 95/54/EC. E-Mark Approved

