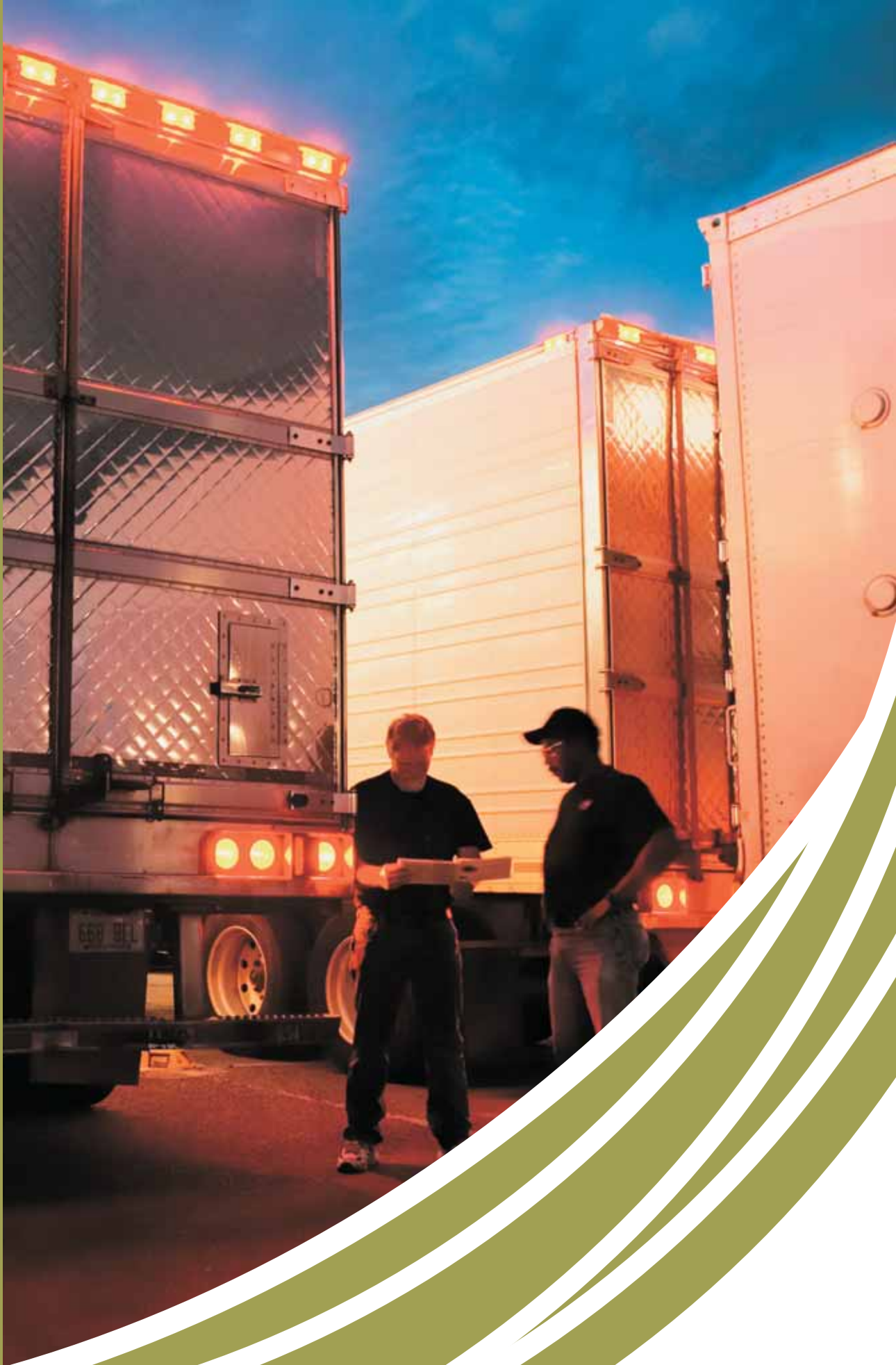


MOBILE HUB SERIES



# MHUB 828



The MHub 828 is a Fleet Telematics unit, primarily suited to sophisticated power users of Fleet Management solutions. The device boasts a wide array of functionalities including distribution management, vehicle maintenance and operation (real time fuel consumption, brake usage, remote vehicle fault diagnostics), comprehensive accident reconstruction, integration with back office platforms (Routing & Scheduling, WMS, ERP) and POD systems.



The MHub 828 forms part of the MHub Fleet Telematics series designed to address many of the operational challenges prevalent amongst the commercial fleets. These include basic activity monitoring, and reduction of the operating costs and enhancing the management of the Supply Chain.

The MHub 828 unit has been deployed around the globe across a variety of industries including logistics, utilities, insurance, telecoms, public transport, 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 analysed 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 geofences. Geofences downloaded to the MHub can be categorised (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 utilised to dynamically resolve delivery problems and to further optimise future delivery schedules.

### Accident Reconstruction

The MHub logs relevant vehicle data including location, speed, direction and harsh braking on a second-by-second basis. After detecting an impact, the device automatically transmits the accident log to a centralised platform. This provides the operator with an accident notification and full reconstruction 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 while maintaining full functional ability. The device can reduce its power consumption to levels well below industry standards, allowing a vehicle to stand for weeks without being driven, while not excessively draining the vehicle battery.

### Temperature Monitoring

Temperature monitoring of refrigeration compartments utilising digital temperature sensors with a range of -20°C to + 120°C. 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

Utilising a proprietary intelligent messaging engine, the MHub selects the least cost data transmission 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 SMS for high priority events when roaming while storing all the low priority unsent data and resuming transmission via GPRS of the low priority data when returning to the home network.

#### In-Vehicle Networks

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

#### PDA Interface

Communication and data file transfers 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)

Utilising 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.

#### Digital Tachograph Interface

The provision of realtime information tachograph information relating to the working state, drive time, vehicle speed and driver cards, etc.

#### Onboard Navigation Assistance

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

## TECHNICAL SPECIFICATIONS

<b>Physical Characteristics</b>	
Dimensions:	Length: 78 mm Width: 129 mm Height: 26 mm
Enclosure:	Plastic
Weight:	164g
<b>Inputs / Outputs</b>	
Digital Inputs:	5
Frequency inputs:	2
Digital Outputs:	4
Driver ID Ports:	1
Digital Temperature Sensors:	up to 4 (optional)
Thermo King integration	
<b>Power</b>	
Power Input:	9V – 40V DC
Power Consumption	
Full Power Mode:	50ma
Deep Sleep Mode:	<7ma
Rechargeable Battery:	900mAh
<b>Environment</b>	
Operating Temperature:	-30°C to + 70°C
Humidity:	90% non-condensing
<b>Communications</b>	
Cellular Platform:	GSM/GPRS 850/900/1800/1900 MHz
Serial Ports:	2
USB:	Slave
Lin Interface:	1
Optional Interfaces:	Bluetooth, Canbus (FMS)

