DIWICON–M
DW 829 W & DW 185 M

MOBILE WORKFORCE MANAGEMENT FIELD TRACKING DEVICE

The DW 829 W Mobile Workforce Management field tracking device is a specialized way to manage mobile workforces. It provides the complete range of DIWICON–M tracking features as well as the vital communication features offered by integration with the DW 185 M console.

The DW 185 M, the Mobile Workforce Management communication console embodies an industrial quality, ergonomic user interface for 2 way voice and documented written communication and online task list management for mobile workforces.

CHARACTERISTICS

- GPS Satellite Localization
- Redundant GSM/GPRS based communication
- Communication console
- Voice kit
- CAN interface
- Web-based settings interface

SPECIAL CHARACTERISTICS

- High sensitivity GPS receiver
- Integrated motion sensor
- Remote software update
- On-board flash memory
- Internal backup battery

INDUSTRIAL QUALITY

- Operational temperature range: –25° C to +60° C
- Case meets the requirements of the IP65 safety standard

I/O FUNCTIONS AND INTERFACES

- 2 digital inputs: Ignition, RPM, and two general purpose digital inputs
- 1 general purpose analog input
- 1 digital output
- CAN interface
- DW 185 M communication console interface
- DW 121 M voice kit (microphone, speaker)

PARAMETERS

Power:	8-30 V DC
Consumption in normal mode:	60 mA (12 V DC, battery charged)
Consumption in sleep mode:	10-15 mA (12 V DC, battery charged)
Capacity of backup battery:	970 mAh backup battery with intelligent charging module
Operational: temperature range:	-25 °C to +60 °C
Dimensions (LxWxH):	100 x 100 x 30 mm
Reverse polarity protection:	Yes
Flash memory:	512 Kbytes

OPERATIONAL DESCRIPTION

BASIC FUNCTIONS

DIWICON–M is the productive way to manage mobile workforces. As the most feature-packed device in the DIWICON-M family, the DW 829 W not only provides a complete range of tracking features but also offers real-time workforce management functions with the help of online voice and written communication.

The basic function of the device is online control of a field workforce. This is achieved by allowing dispatchers to issue written tasks directly to drivers or communicate with them by voice.

Besides the workforce organization functions, standard fleet management features are also available. The device sends several types of information about the vehicle (position, speed, RPM, ignition, and other data) to the central database server.

The vehicle data information sent by the mobile devices to the central workforce management server can be monitored by the dispatcher.

In addition to geographical positioning, numerous statistical and reporting functions are also available to the dispatcher.

OPERATION

When the device is installed in a vehicle, the GPS receiver determines its position. At the same time, the device establishes an iWWAN (GPRS) connection and registers with the central database, to which it sends the detailed information collected.

When the vehicle is not in use, the DW 829 W optimizes power consumption. The built-in motion sensor automatically detects the stationary state and switches to standby mode after a specified period of time. When the device begins to move again, object tracking automatically begins.

TASK LIST MANAGEMENT

Each mobile device can store 12 tasks. The DW 829 W database can store a maximum of 1000 workforce tasks per vehicle. Dispatchers can create or refresh these tasks via the central management interface. New tasks will be confirmed on the mobile device. Drivers can mark those tasks which have been completed. Any change in the task status will be automatically reported to the central management server.

CAN INTERFACE

The device can be connected to the FMS CAN interface of the vehicle. This makes the collection of specified SAE J1939 standard information possible, and forwards it to the server over the GPRS network for further processing. The CAN bus provides detailed information about the vehicle, such as total milage, total fuel consumption, and current fuel level.

COMMUNICATION CONSOLE AND VOICE KIT

The driver can begin a voice and/or text messaging communication session with the dispatcher of the central operation system with the help of the DW 185 M communication console and the DW 121 M voice kit set. This is a bidirectional communication method, so it can also be initiated by the dispatcher.

SETTINGS

The operational parameter settings are easily adjusted via the web interface of the central server. These pages allow for the adjustment of the network settings, the tracking and motion sensor sensitivities, stand-by mode timing, and signal button functions.

SOFTWARE UPDATE

To ensure easy upgradeability, the program memory can be remotely accessed by system engineers.

The upload is done with the help of the DIWICON 9000 FWU software module.

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