

# CASON

## Mikey



## DW 3180 IT

### ZIGBEE BASED INDOOR/OUTDOOR TRACKING DEVICE

The world's first ZigBee based tracking device with location and application dependent function button. The Mikey is able to server the needs of various fields of applications. From security companies, protected buildings, mines, industrial facilities, banks, fairs & conferences, hospitals, till asset management the usability of this device is almost endless.

#### FEATURES

##### Usage

The DW 3180 IT is recommended for use in facilities where it is important to register and know the location and status of visitors, workers, or physical assets. An added advantage is a button which activates variable functions depending on the location when it is pressed.

##### Efficient operation

The device is powered by just 4 button cell batteries and yet can be used for years without charging or replacing the batteries. It does not require any maintenance. This is achieved by very low power operation and an intelligent sleep mode. The device can be switched off via an internal magnetic relay when not in use.

##### ZigBee Based Positioning

The device employs the so called ZigBee technology, a very secure and efficient radio communication protocol. It does not depend on GPS or cellular communication systems. Positioning precision and reliability depend exclusively on the extent of the system installed. (See the system description). Can be used to monitor authorized presence in restricted zones.

##### Credit card sized

The Mikey is unobtrusively small and light. It fits easily in a pocket and can also be worn around the neck. Its ergonomic

design does not burden the carrier and makes it easy to use.

##### Location Dependent Button

The Mikey is equipped with a button which changes its function depending on the application and the location when pressed. It can, for example, be used as a panic button or be programmed to activate the opening of a door when in close proximity. It can also verify the completion of certain activities in a workflow process.

##### User Interface

In addition to the device, the system includes several applications facilitating ease of use. Since all data is collected and archived, users can generate reports and graphs, display alarms, and view positions on digital maps. The device itself has a LED which indicates to the user when the battery is low, when motion is detected, and when the dispatcher has acknowledged an alarm.

##### Security

The device has a so-called "man-down" function which detects lack of motion. If the carrier is incapacitated and is unable to call for help, the man-down function automatically sends an alarm.

The Mikey can be combined with a passive RFID card to create dual-level "access-control" security.

## TECHNICAL DATA

<b>Internal power:</b>	4 pieces 3V LiMnO <sub>2</sub> battery
<b>Operating temperature:</b>	-20°C to +85°C
<b>Relative humidity:</b>	5% to 95% (non condensed)
<b>Dimensions (L x W x H):</b>	85,8 x 53,9 x 6 mm
<b>Weight:</b>	30 g

## COMMUNICATION

<b>External Interconnection:</b>	IEEE 802.15.4 Standard 2.4GHz ISM frequency band
----------------------------------	---

## RF MODEM FEATURES

- Fully compliant 802.15.4 Standard transceiver supports 250 kbps O-QPSK data in 5.0 MHz channels and full spread-spectrum encode and decode
- Operates on one of 16 selectable channels in the 2.4 GHz ISM band
- Output power: 1mW for 2405 to 2485 MHz ISM band
- Receive sensitivity < -92 dBm at 1% PER

## APPLICATIONS

### Security companies – Proof of presence

Guards equipped with Mikey ID units can be tracked indoors or outdoors. This enables accurate proof of presence applications such as patrols and quick response teams. The man down function generates an alarm if an individual is incapacitated.

### Protected buildings - indoor visitor tracking & access control

For visitors in protected buildings (e.g. government, national security, research centers), the device doesn't just offer access control but also records where the visitor has been. This helps to prevent and detect espionage, or after information has already leaked out to expose those responsible.

### Mines - [Underground tracking]

The device can be used for tracking and calling for help in mines and other underground or indoor locations where GPS does not work. Such environments are typically easy to map out and fully cover with a Mikey system, providing emergency and rescue personnel. An explosion-proof model of the device will be also be available.

### Industrial facilities - Application area

For access control and alarm generation in industrial facilities, secure, and even explosion hazard environments. Used together with a passive RFID card dual-level access control can be achieved.

### Banks - Access control & Security

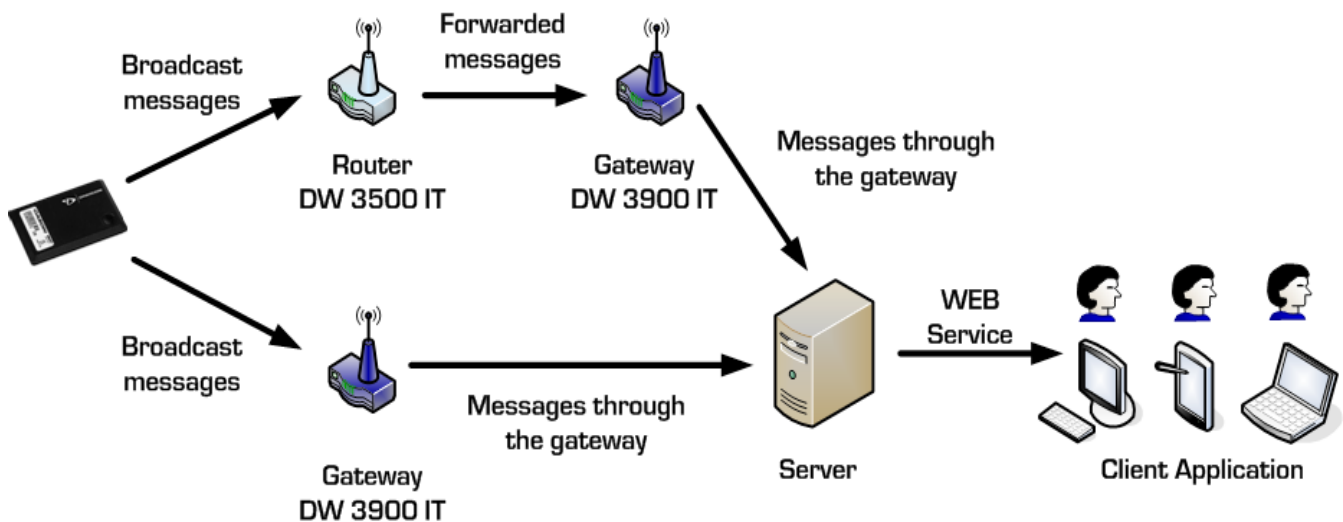
The performs and outsource security functions. Mikey - device which appears to be a simple RFID card - provides flexible solution for bank employees to signal in emergency without being detected.

### Fairs, conferences - Visitor tracking

The device is also useful for collecting location dependent data and statistics of visitors to exhibitions and conferences. The data of visitors and exhibitors is captured by the organizers providing valuable data for both sides.

### Asset Management - Tracking of high value shipments

The DW 3180 IT can be placed within containers on trucks, ships, and trains or even on individual products. If the object leaves a given zone, (e.g. a warehouse) an alarm can be generated by the router or simply be registered in a log. This method is also effective if the device is tampered with by attempts to remove, destroy, or interfere with the signal because if the device does not emit a signal, an alarm is generated.



#### CORPORATE HEADQUARTERS

CASON Engineering Plc.  
Velencei út 37  
H-2030 Érd, Hungary  
Tel: +36 23 522 100  
Toll free: 1-888-DIWICON  
Fax: +36 23 522 190  
E-mail: office@cason.hu

#### OFFICE - ROMANIA

CASON România S.R.L.  
3C, Dr. Grigore Romniceanu  
Street Sect 5, Bucharest  
RO 050574, Romania  
Tel: +40 21 411 31 61  
Fax: +40 21 411 31 62  
E-mail: office@cason.ro

#### OFFICE - RUSSIA

International Business  
Development  
4, Akademicheskaya Square,  
424  
142191, Troitsk, Moskovskaya Obl., Russia  
Tel: +7 985 960 43 88  
E-mail: attila.kovacs@cason.hu

#### OFFICE - UKRAINE

CASON Ukraine  
60, Artem Str.  
04050 Kiev, Ukraine  
Tel: +38 050 375 84 85  
E-mail: dmalykhin@cason.hu