

MOTOTRBO **HFI** Products



Product Families

Modular System:

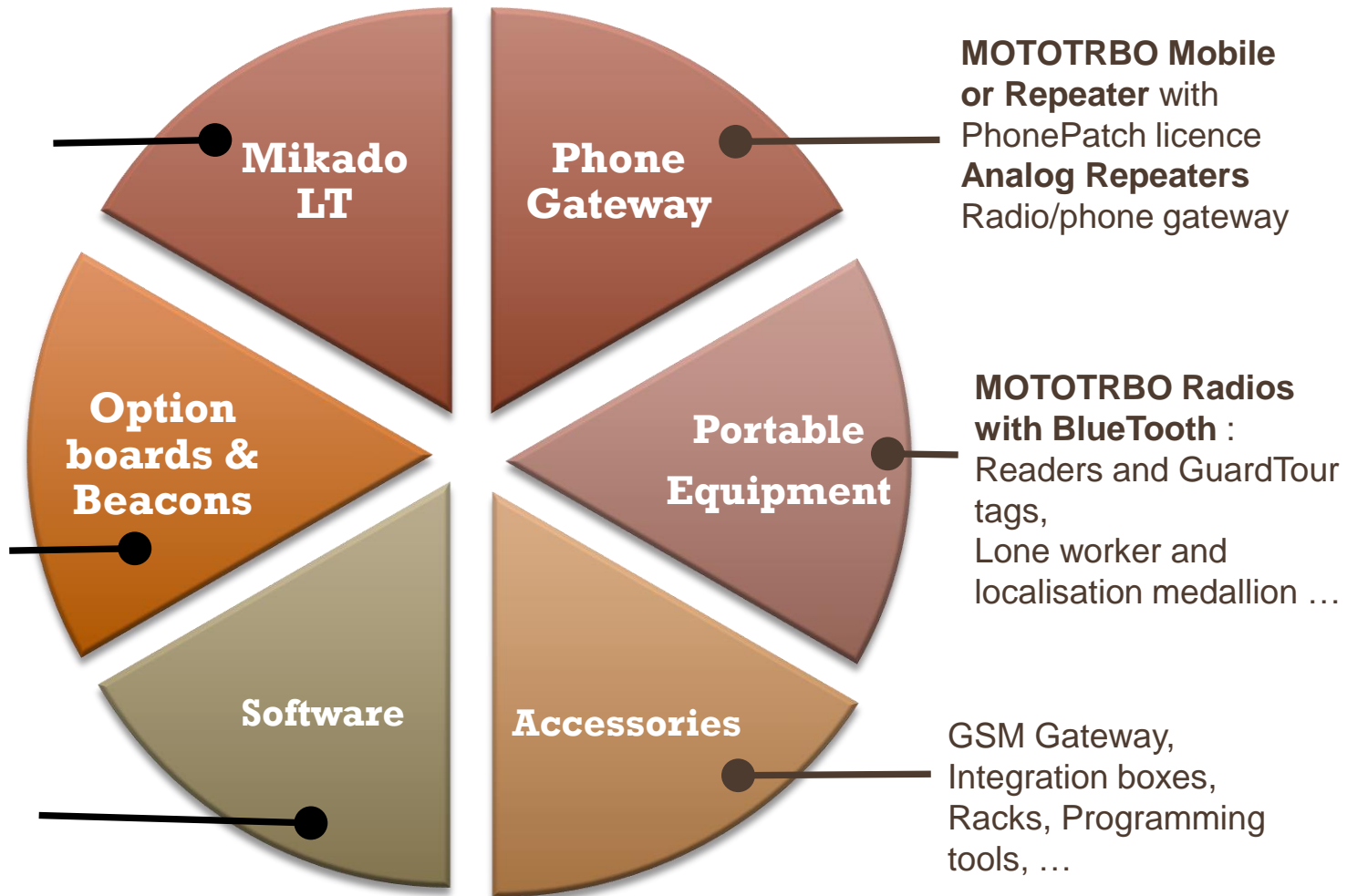
- Alarm report
- Phone
- Intercom
- Telemetry
- BMS
- Lone worker
- ...

MOTOTRBO OB:

LW Option Board with optional RF800 localisation
iBeacon or RF800 beacons

PC Software

Geolocalisation, guard tour management, alarm display ...



Mikado LT

Mikado LT

Description

Mikado LT is a fully modular interface system with MOTOTRBO Radios



Main Features

- ⦿ Lone worker alarms management
- ⦿ Indoor/Outdoor localization
- ⦿ Failsafe radio monitoring
- ⦿ Phone Gateway (analog and/or VoIP)
- ⦿ Intercom Gateway
- ⦿ Alarm Report to radio, phone, ... (voice, text, SMS, email, MODBUS, Pager, Telemetry ...)
- ⦿ Remote control
- ⦿ RoIP, VoIP interface ... (UA SIP, Proxy SIP)
- ⦿ HIP protocol to PC software (HFI, Micromedia, ...)
- ⦿ ...

Mikado LT

Composition



MM-A112

Master module / VoIP & RoIP interface

MO-T104

Analog phone interface module

Extensions, max = 2 units

MO-IO102

Input (8) / Output (2) module

Extensions, max = 10 units

MO-O101

Output module (8)

Extensions, max = 10 units

MO-I102

Intercom interface module

Extensions, max = 2 units

Mikado LT

MM-A112



- MikadoLT Master Module
- ARM Processor
- OS Linux embedded
- Multiple communication Protocols are supported :
MODBUS, ESPA 4.4.4,
Telemetry, AT, ...
- Simple to setup and to update (WEB interface or USB configuration key)

MM-A112 can also be used as a simple IP gateway with localization applications, guard tour, lone worker alarm management, ...

HFI GeoGuardTour, Micromedia ALERT, etc.

Mikado LT

MM-A112

Input/output audio control lines PTT/SQ I/O:

- In
- Gnd
- Out
- TxD

USB Port : firmware update, messages, USB storage, USB HUB, USB RS485 port, ...

RS232 port : printer, host system (BMS, Fire Panel, Intrusion Alarm,...):

- Gnd
- CTS (output)
- RxD (input)
- TxD (output)

Input/output audio analog lines (connection to mobile or repeater):

- Tx (output)
- Gnd
- Rx (input)
- Gnd



USB Port : Connection to MOTOTRBO Radio

- Gnd
- DP
- DM
- Vcc 5V

Ethernet 10/100M Port : configuration, remote control, host system IP link (BMS, Fire Panel, GSM Gateway, IPBX, ...)

Mikado LT

Applications

Example #1 :
Lone worker
With indoor localization

Example #1 - Mikado LT – Lone worker with localization



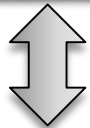
Mikado LT

Applications

Example #2 :

Fail safe radio monitoring

Example #2 - Mikado LT – Fail safe radio monitoring



MM-A112



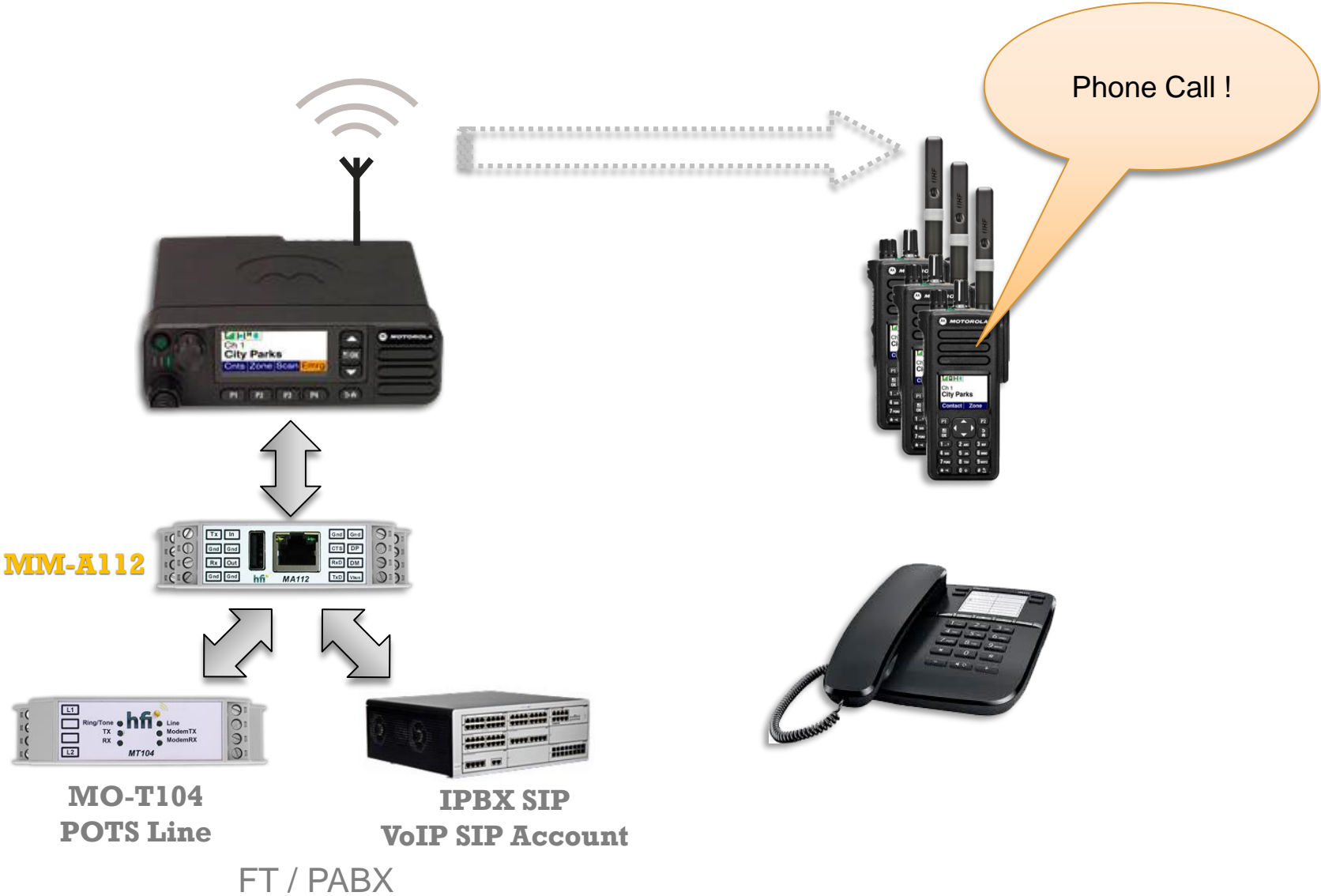
Fail safe radio monitoring
Radio #14 !

Mikado LT

Applications

Example #3 :
Phone Gateway

Example #3 - Mikado LT – Phone Gateway



Mikado LT

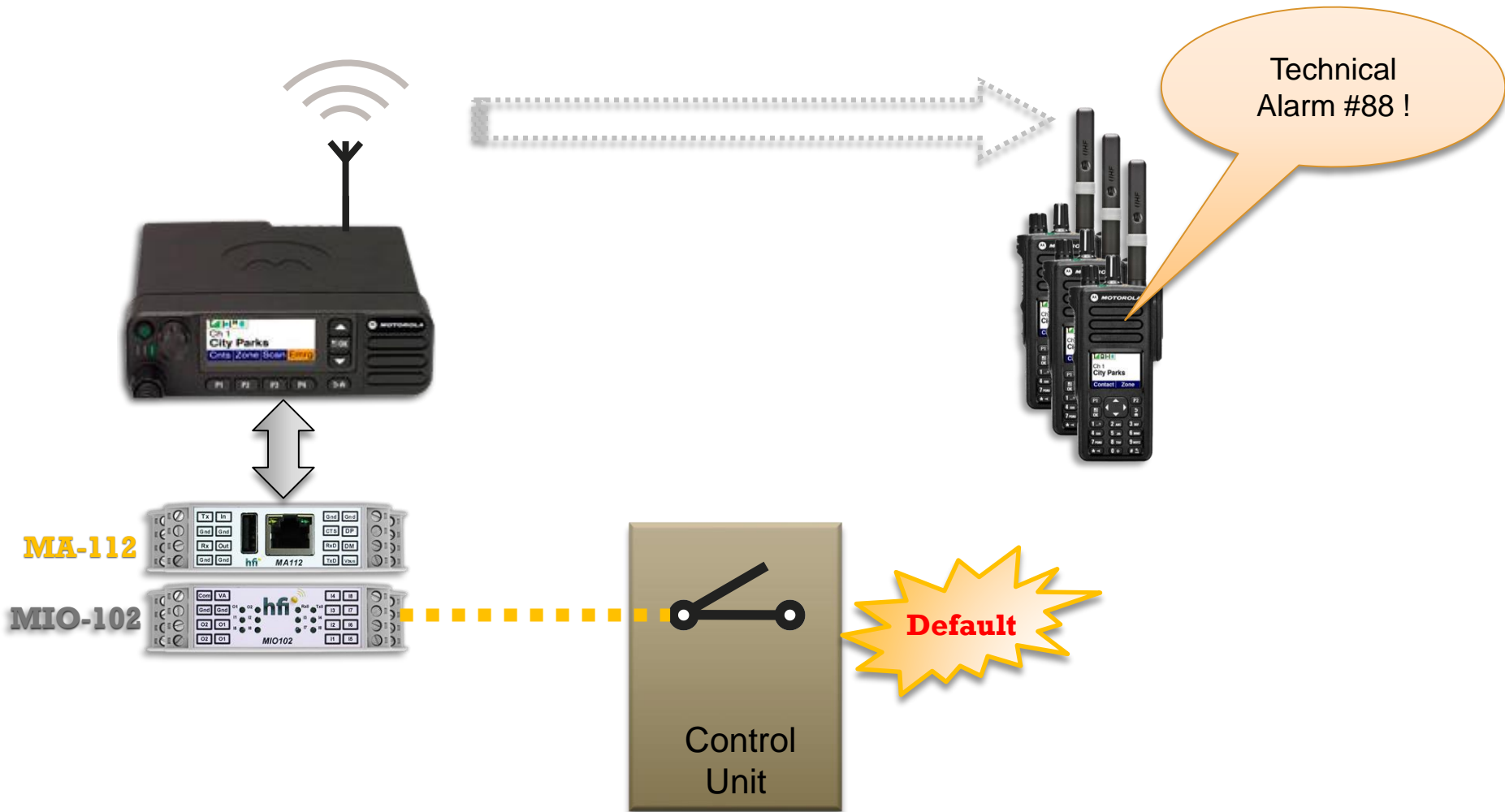
Applications

Example #4 :

Voice & Text Alarm report

Dry contacts

Example #4 - Mikado LT – Voice & Text Alarm report

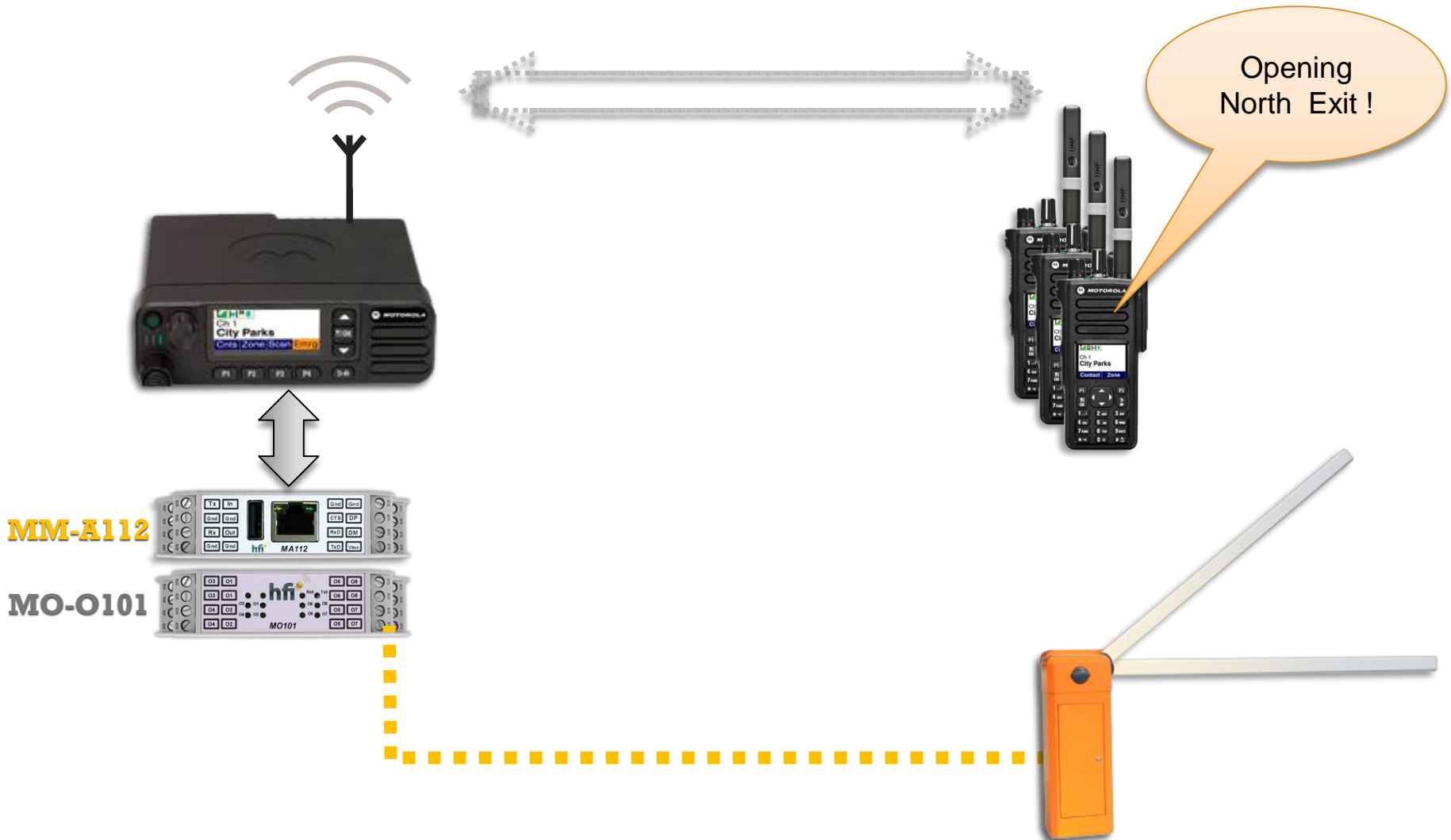


Mikado LT

Applications

Example #5 :
Remote Control
Dry contacts

Example #5 - Mikado LT – Remote control



Applications

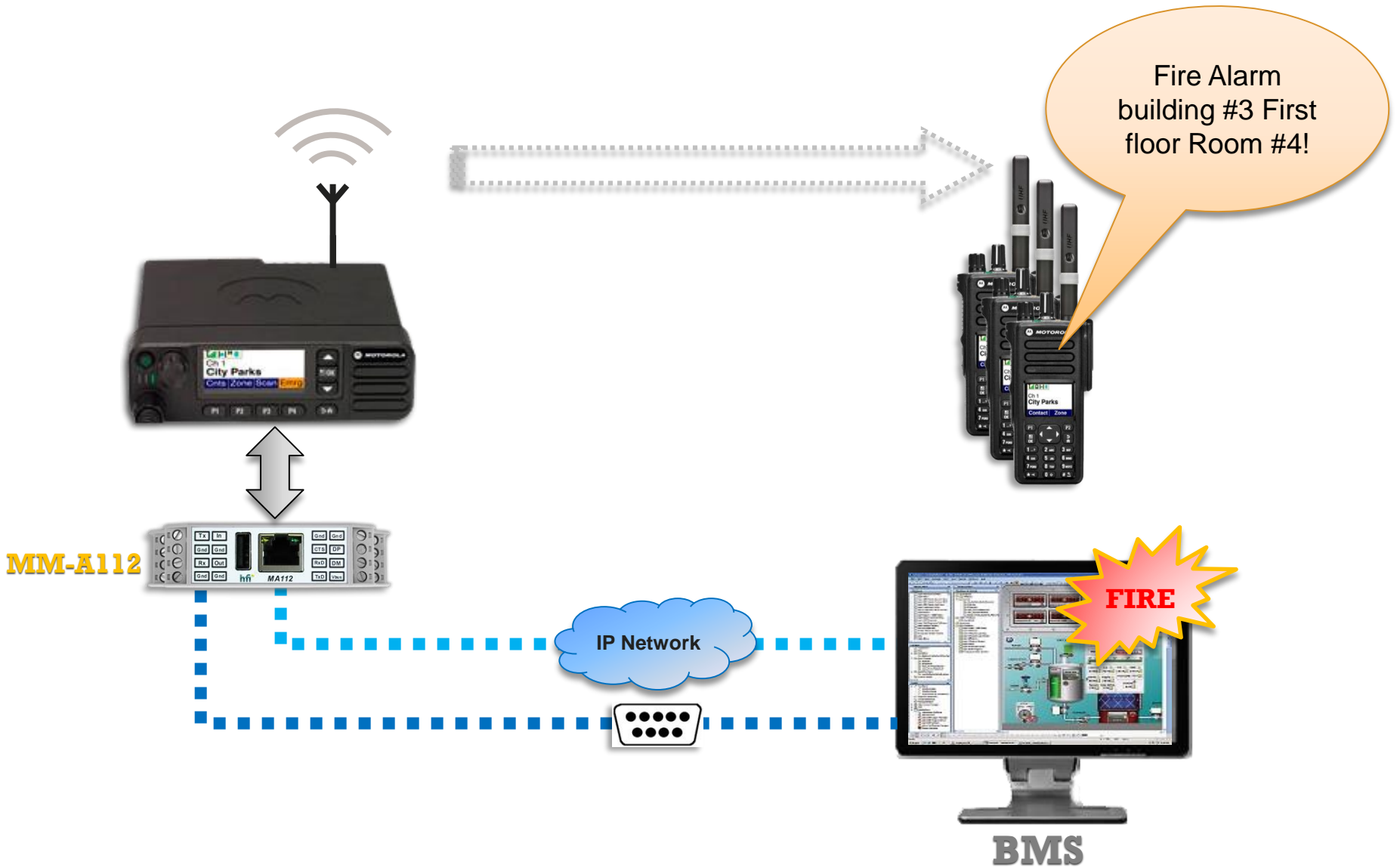
Example #6 :

BMS & Fire Panel Alarm Report

IP or serial link

Protocols : MODBUS, ESPA 4.4.4, AT, ...

Example #6 - MikadoLT – BMS & Fire Panel Alarm report



Mikado LT

Applications

Example #7 :

HIP Interface to PC Application

Example #7 - Mikado LT – HIP Interface to PC Application



iBeacon-HB



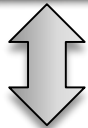
RF800BP



RFID



BlueLocV



MM-A112



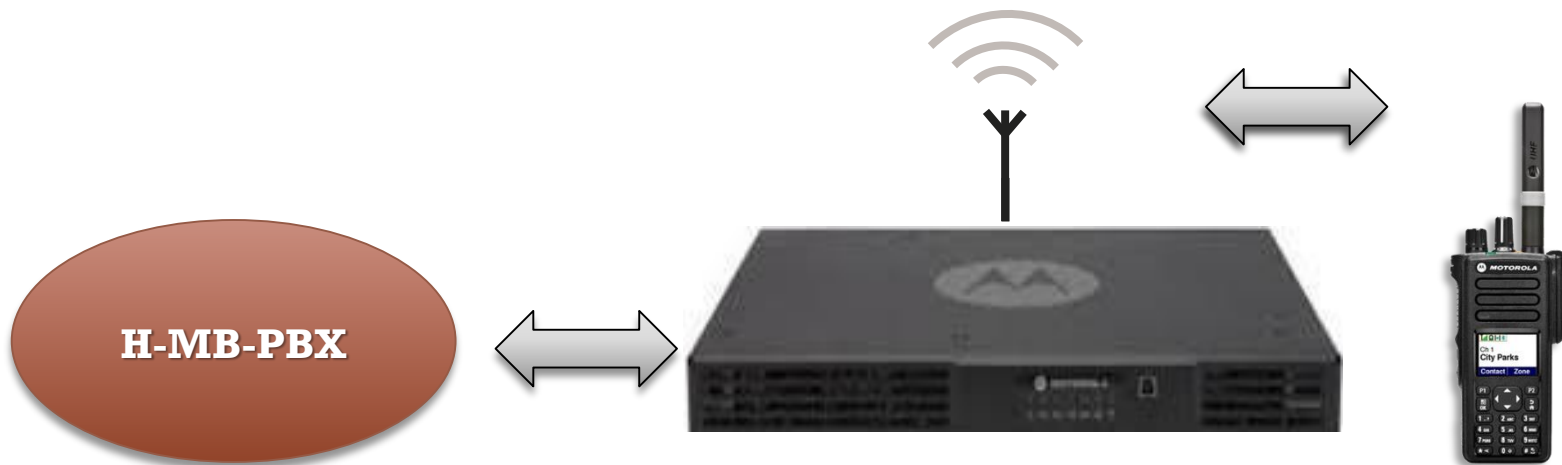
Management Unit : GeoGuardTour,
Micromedia ALERT, ...
Guard tour / localization, Alarm report, ...

MB-PBX

MB-PBX

Description

H-MB-PBX is a phone gateway for MOTOTRBO Repeater DR3000/MTR3000/SLR5500 with PhonePatch option or MOTOTRBO Mobile DM4000



Characteristics

- **Small size : easy of use in radio systems**
- **Based on MikadoLT A112 and T104 standard modules**
- **Configuration with a web explorer**
- **Any parameters tunable with the web dialog :
Gains, polarity, repertory, alerting time, number of rings,
tones, voice messages, ...**
- **Pre-defined dial numbers**
- **Voice messages : welcome, call in progress, call waiting,
busy subscriber, ...**
- **Replacement for HFI DMR/PABX legacy products with
new features : VoIP, LW with localization, ...**

MB-PBX

Composition

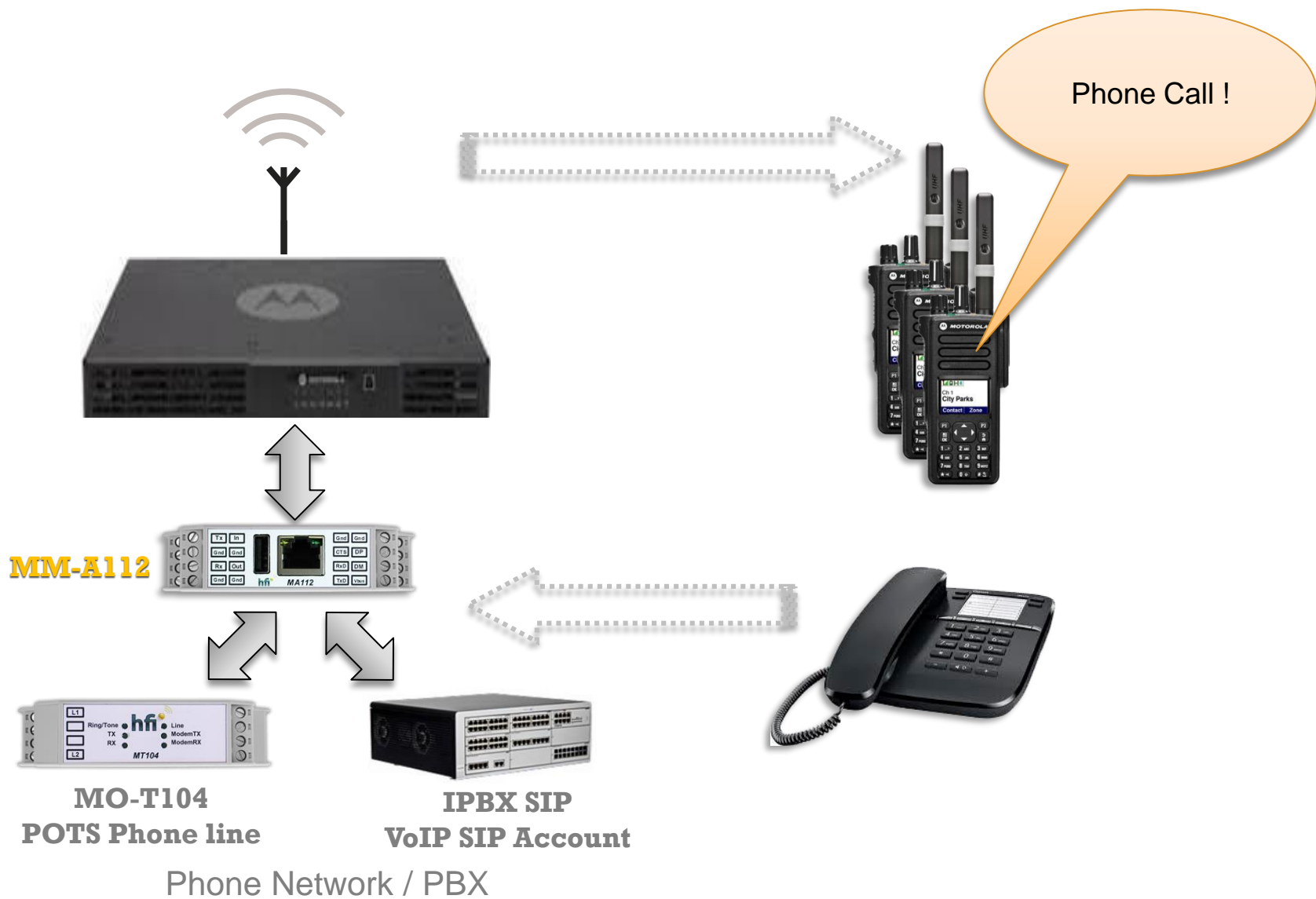


MM-A112B

Master module / VoIP & RoIP Interface
Limited to phone gateway and LW features

MO-T104 OPTIONAL

Analog phone interface module
Extension, max = 2 units



HFI Option Boards & Microcode for GOB

Option Board

LW

POB-MD



POB-MD4



LW Oprion Boards

POB-MD
DP3XXX
DM3XXX



POB-MD4
DP4XXX
DM4XXX



Description

- **Man-Down mode**
- **Stillness mode**
- **Time period for the pre-alarm sound**
- **Duration of pre-alarm sound before activation of the portable emergency mode**
- **Angle of inclination in man-down mode**
- **Threshold of immobility in the stillness mode**

Option Board

LW with RF800 localization

RF800-MD



RF800-MD4



Description

LW Option Board with RF800 localization

RF800-MD
DP3XXX



RF800-MD4
DP4XXX



- Localization with RF800 beacons
- Man-Down mode
- Stillness mode
- Time period for the pre-alarm sound
- Duration of pre-alarm sound before activation of the portable emergency mode
- Angle of inclination in man-down mode
- Threshold of immobility in the stillness mode

Option Board

Microcode HFI H-iBeacon-LB

Description

Microde H-iBeacon-LB

iBeacon-LB is a microcode (firmware) which allows to use built-in indoor localization feature of Motorola MOTOTRBO radios with all **MikadoLT** product, and with all software applications using HFI products :

- **GeoGuardTour (HFI)**
- **ALERT (Micromedia International)**

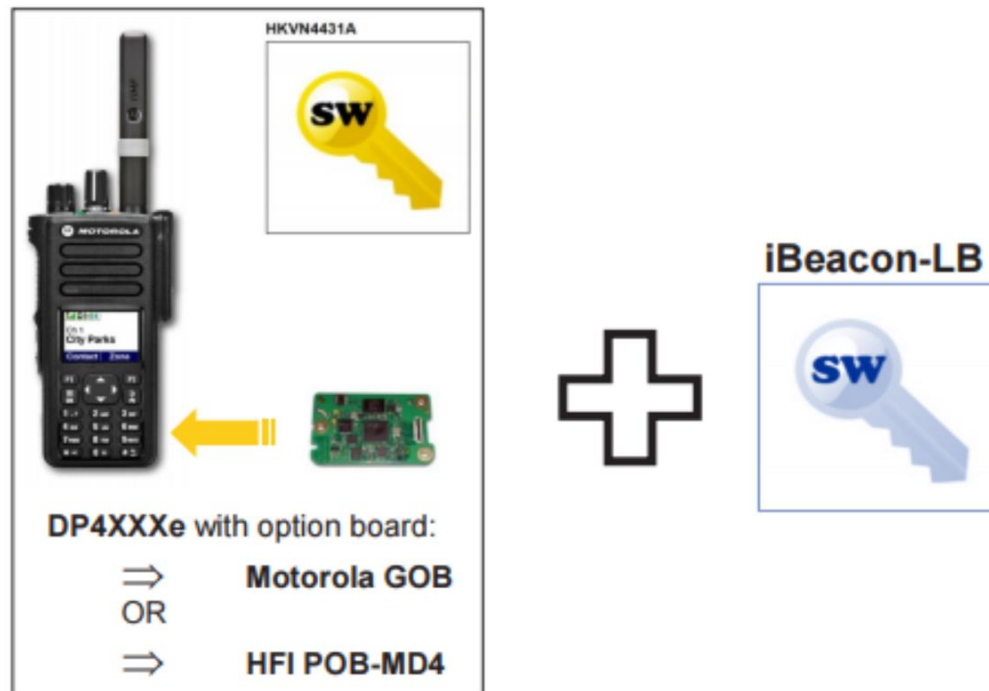
... or any other application which is compatible with HIP protocol.

- **Compatible MOTOTRBO radio handhelds:**

⇒ **DP4401e, DP4601e, DP4801e, DP3441e ou DP3661e with options :**

- ◇ Motorola Indoor Location Tracking - Licence Key
- ◇ Motorola Generic Option Board or HFI Option Board (any type)
- ◇ **HFI iBeacon-LB - Microcode**

Note: the « man-down » feature is provided by HFI microcode iBeacon-LB



Microde H-iBeacon-LB

Description



SL4010e with options :

- ◇ Motorola Indoor Location Tracking - Licence Key
- ◇ Integrated Mandown - Licence Key
- ◇ **HFI iBeacon-LB - Microcode**



iBeacon-LB



Indoor localization

Beacons

RF800 & iBeacon

RF800 866/915 MHz Indoor Localization Beacon

Description

RF800BP
Beacon



- To be used with RF800-MD(4) option boards
- Band 868 MHz or 915 MHz
- Endurance (typical) : 48 months
- Robust enclosure : IP66 (12 x 9 x 5 cm)
- Powered by battery : type D (LR20)



Features

RF800 866/915 MHz Indoor Localization Beacons

- ◎ **Fully automatic localization**
- ◎ **Versatile system:**
permanent tracking or Lone Worker alarm
- ◎ **Low battery alarm**
- ◎ **Wireless setting**
- ◎ **7 power levels (max 10mW)**
- ◎ **Transmit rate : 0,5 to 120 seconds**

iBeacons

Beacon
iBeacon-HB



Description

- **Compatible with MOTOTRBO radios**
- **Android application for a setting following Motorola recommendations**
- **Rugged and waterproof IP65 UL94HB housing (5 x 5 x 3.5 cm)**
- **Lithium battery power supply CR17345**
- **CE certification**
- **Autonomy at 251mS: 42 months (-20dBm) 36 months (4dBm)**

Portable equipment

RFID tag reader

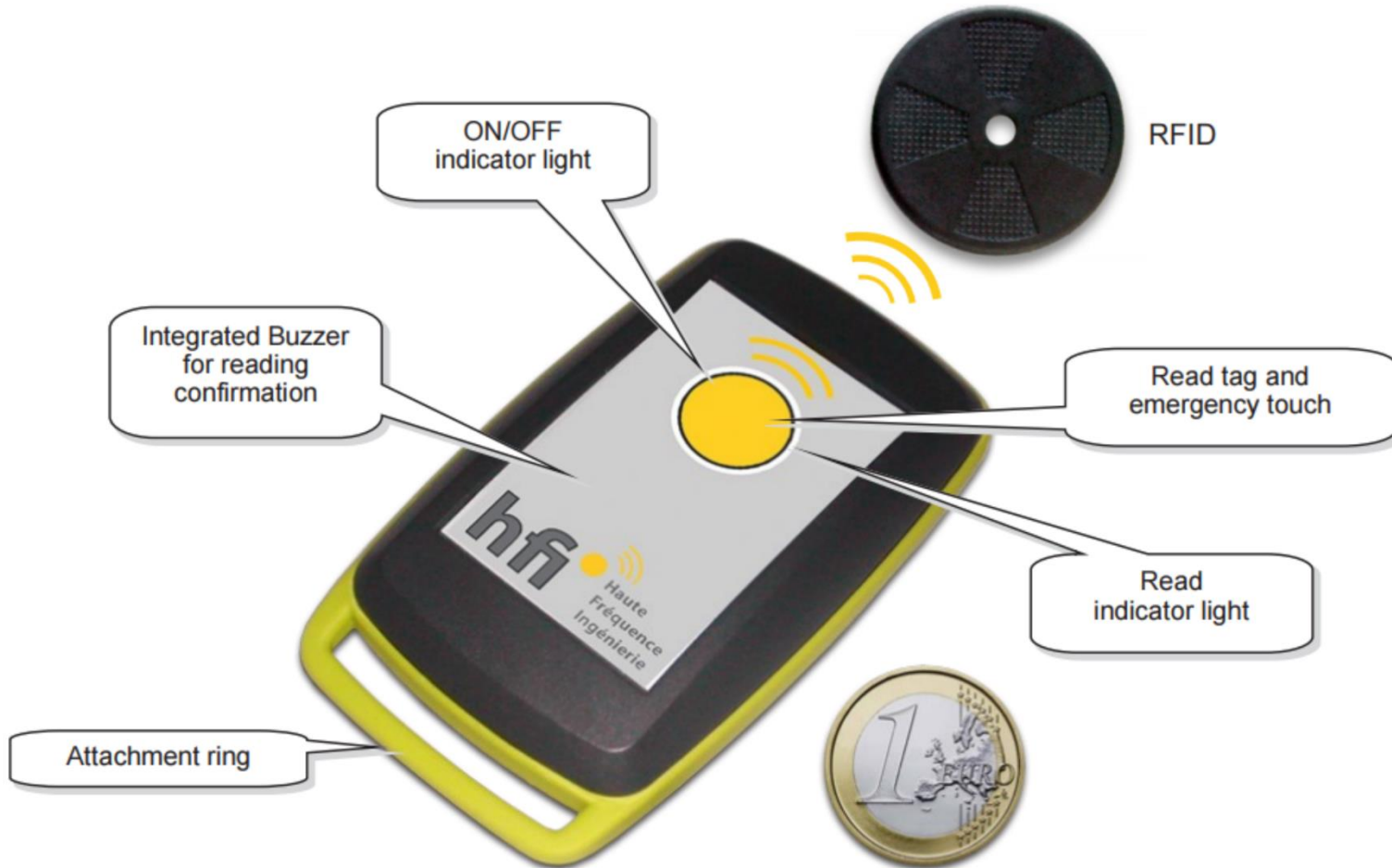
Bluetooth

BlueLoc (PTI,RF800) / BlueLocV (RFID)



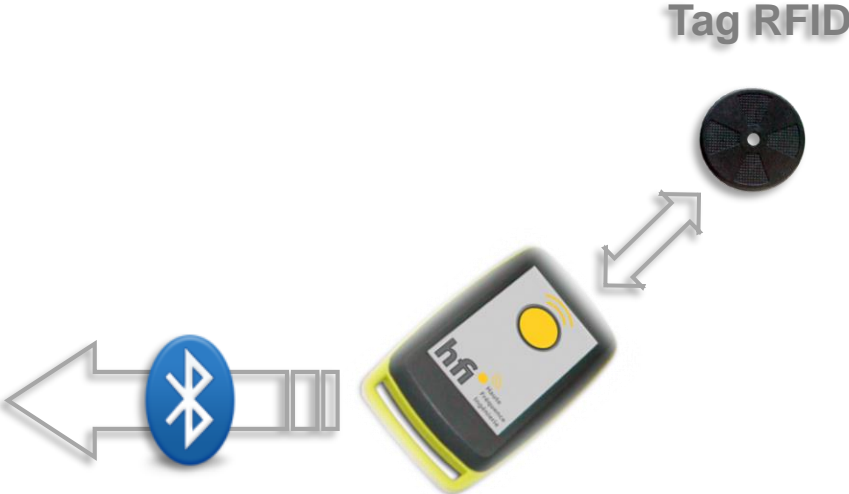
RFID tag reader - BlueLocV

Description



Principle

RFID tag reader - BlueLocV



Principle

Lecteur Bluetooth de tag RFID - BlueLocV

The **BlueLoc** reader **BlueLocV** version allows automatic reading of RFID tags without pressing the button, by simply positioning the reader vertically.



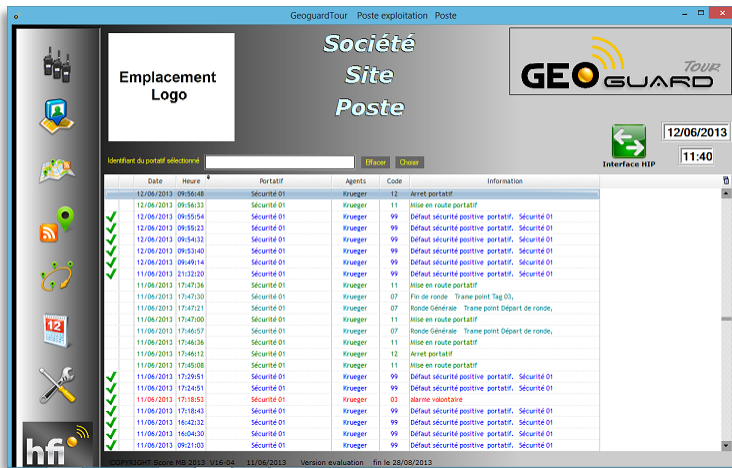
PC Software

Software

Indoor / Outdoor Location and
Real Time Round Management
on DMR MOTOTRBO

GeoGuard Tour

Description



- Localization of DMR radio terminals in real time :
 - Indoor by RF800 or iBeacon radio beacons
 - Outdoor by GPS
- Real-time round-up RF800 tag, iBeacon and / or RFID tag management
- Management of Lone Worker alarms with location on plan
- Failsafe monitoring of radio devices
- On-plane tracking of terminal movement and real-time rounding
- Management and allocation of radio terminals and assignment of users
- Managing the switching on and off of radio terminals
- Visualization of the general activity of all terminals
- Historical rounds and events with multi criteria search
- Report on events or incidents with closure by user
- Administration mode for managing software configuration settings
- Etc.

Synoptique MikadoLT – Interface HIP – Logiciel GeoGuardTour



BlueLocV



Unité de gestion
Rondes / géo localisation, Report
d'alarmes, etc.

MM-A112

- ◉ **Located in France in the Inovalée Technopole in the Grenoble region**
- ◉ **Accredited Motorola partner application development**
- ◉ **Design MOTOTRBO solutions**