

MFUHF

Communication via UHF frequency radio messages

MFUHF circuits are small and compact remote control devices, fitted inside our LED lanterns. The sending and receiving remote control signals is done through UHF frequency radio messages, on free-band.

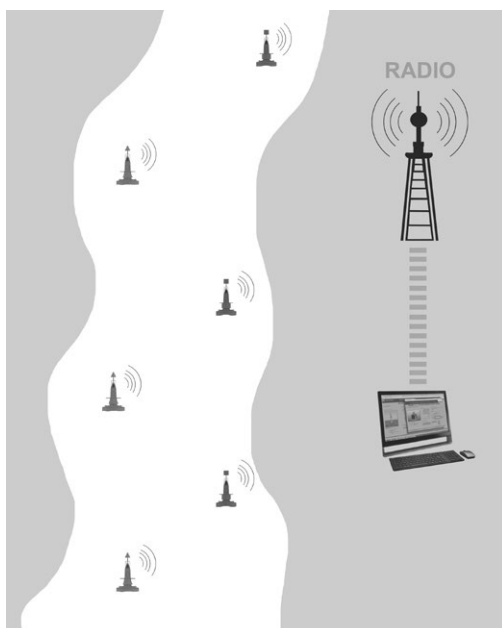
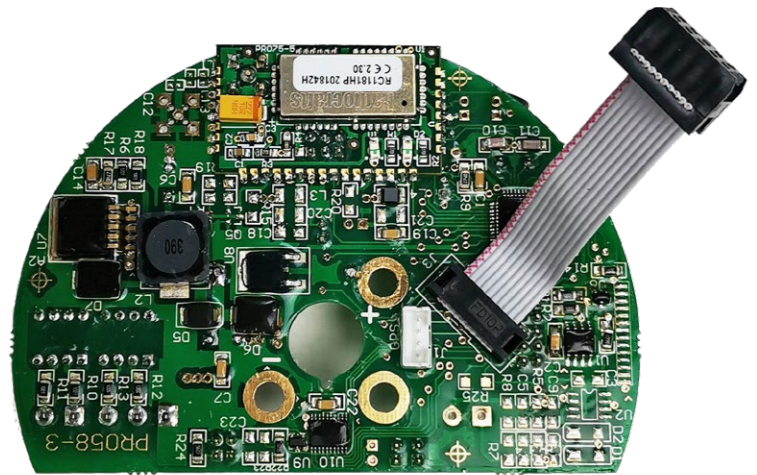
Ideal when there is a high concentration of remote stations

It is ideal when there is a high concentration of medium-distance remote stations, as for example port entrance channels, bays, river beacons, etc.

Possibility of subsequent installation

Signals and alarms are transmitted to the control centre. Therefore, the ideal complement to the system is the NETCOM Remote Monitoring Control Centre, in order to process and manage all the information exchanged.

Its modular construction allows its installation subsequently to the purchase of a MSM lantern.



FEATURES

- Ideal to remote monitoring and control of MCL and MBL lanterns.
- Communication by ICM free-band radio to a control centre.
- Positioning and swinging radius on buoys (when including MFGPS module).
- Configuration is made by PC and RS-232 cable, using a free software. It can also be remotely settled through radio.
- A configurable sleep mode is available in order to save energy, but maintaining the transmission of messages at real time.
- No operation cost.
- Minimum energy consumption.
- Free-communication protocols, which allows the user to utilise his own control centre or use them for any other application needed.
- "Vigilantic" system available.
- Its ideal complement is the NETCOM Remote Monitoring Centre.

MFUHF

TECHNICAL SPECIFICATIONS

| | |
|-----------------------------------|-------------------------------------|
| Power range: | From 5,5 to 35V. |
| Daily average consumption: | 12 mA (RADIO) 17 mA (RADIO+GPS). |
| Temperature range: | -30° to 60°C. |
| UHF frequency: | RADIO-ICM 868.10 to 869.65 MHz. |
| Emission power: | From 10 to 500 mW, adjustable. |
| Sensitivity: | -105 dBm. |
| Relay function: | Up to 16 hopping radio. MESH. |
| GPS MFGPS receptor: | 12 channels. |

OPERATION COST

No operation cost.
Free-band radio, without channel contract.
It only informs in case of alarms or commands.
Adjustable maximum limit of messages per day.

OPTIONS

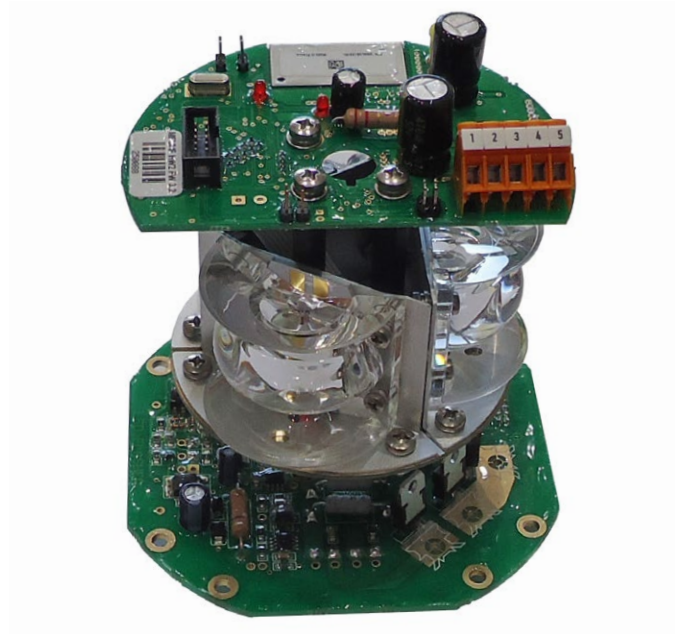
Other modems available at other frequencies.
MFGPS position/synchronisation module.
Other status/alarm signals and commands available under request.

REAL TIME MONITORING SIGNALS

Lantern off.
Mooring-chain breaking by GPS positioning (for buoys).
Battery voltage reading.
LED current consumption reading.
Solar charging reading in accumulated Ah/day.

REAL TIME ALARMS BY SMS

Lantern off.
LED diodes failure.
Mooring-chain breaking.
Low battery voltage.
Flasher failure.
Photocell failure.
Wrong flashing rhythm.
Excess consumption of the lantern.
Solar module charge failure.



COMMANDS FROM USER/ CONTROL CENTRE TO BEACON

Report request on beacon general status.
Day-Night mode change.
Flasher reset.
GPS reset (when included).
Position self-detection.
Alarm acknowledgement by users.

MFUHF MODULE FEATURES

Communication by means of codified radio messages.
Independent communication module from flasher, improving safety and global reliability.
Sending of status and alarms by means of codified radio messages.
Alarm detection on beacon operation, power supply and mooring-chain breaking in buoys.
Remote re-programming via radio.
Protection system through passwords and authorized users.
4 nos. configurable digital inputs by user (impact detection, tamper, etc.).
Radio network auto-configuration by means of MESH protocol.

! Specifications subject to change without previous notice.