



MTF Remote Control Unit is a universal device designed for AtoN remote monitoring, especially for long-range beacons and major lighthouses.

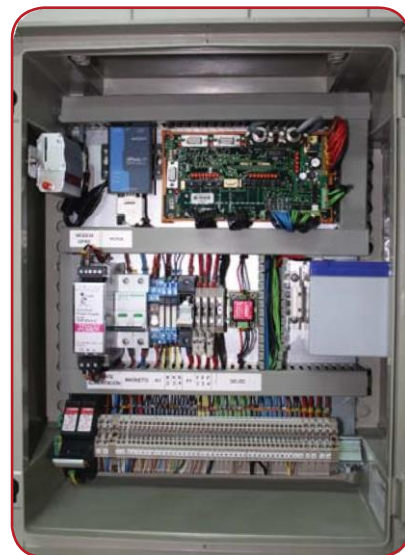
It has multiple digital and analogical inputs and outputs, opto-coupled which may be timed and adjusted at different levels by a configuration software; as well as to configure their logic, being easily adapted to any control system installed into a lighthouse or beacon.

The unit uses different communication modems, depending on the way selected: GSM, radio, AIS, satellite, IP, microwaves, fibre optic, etc.

Although its ideal complement is the GLOBAL NETCOM Remote Monitoring Centre, the communication protocol used is free, in such a way that it is very easy to send the information to any existing platform.

FEATURES

- ✓ Compatible with lighthouses and rotating beacons, with lamps and LEDs.
- ✓ Monitoring of solar power supply systems, diesel generators, etc.
- ✓ Direct current measurement for solar charging up to 15A, or up to 100A with external Hall sensors.
- ✓ Rotation alarm detection for lighthouses through a magnetic rotation sensor.
- ✓ 12 or 24V d.c. power supply.
- ✓ Analogical inputs by voltage or current, with configurable alarm threshold detection. Current measurement up to 100A.
- ✓ GPS, DGPS modules available as an option.
- ✓ Configuration and testing software for PC, and remote programming.
- ✓ Reverse-polarity and atmospheric over-surge protections.
- ✓ Configurable sleep mode available in order to save energy.
- ✓ Redundant communications available with several modems and different technologies.

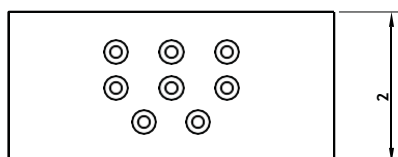
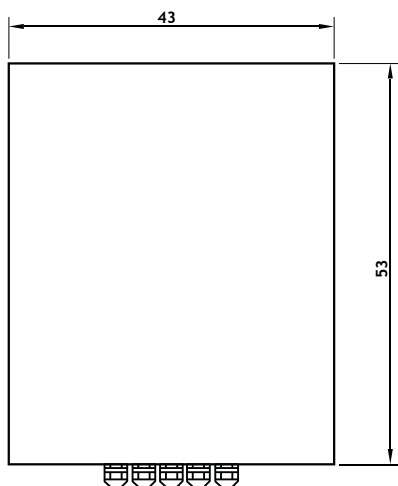


UNIVERSAL REMOTE CONTROL UNIT FOR LIGHTHOUSES

MTF



Specifications subject to change without previous notice.



Technical specifications

Power supply voltage:	12 or 24V d.c.
Daily average consumption:	25 mA.
Internal battery:	12V-12 Ah.
Temperature range:	-30° to 60°C.
Watertightness degree:	IP 65.
Dimensions:	530x430x200 mm.

Type of communications (depending on modem)

GSM:	SMS/GPRS (850, 900, 1800, 1900 Mhz).
Radio:	UHF 869 Mhz or 330 to 473 Mhz. VHF 135 to 174 Mhz or 218 to 238 Mhz.
Satellite:	E-mail messages(Iridium/Inmarsat).
AIS:	Messages 6 and 8 (161.972 a 162.025 Mhz).
ADSL:	IP fixed connexion.
Microwaves:	IP linked (Wifi or Wimax).
Optical fibre:	Serial converter IP link.

*Other frequencies and types of communications available.

Inputs/Outputs	MTF 800	MTF 900
Opto-coupled digital inputs:	4	16
Opto-coupled digital outputs:	3	9
Analogical inputs V/I:	3	7
Power outputs:	-	1 (8 A)
Inner current sensor:	15 A	15 A
External solar current sensor:	1 (100 A)	6 (100 A)
RS-232 ports:	2	6
RS-485 ports:	-	1

Adjustable parameters (programming software)

Input and output timing.
Reversal of logic.
Status view of every input/output.
Alarm and status threshold adjustment.
Analogical value reading.
Type of communications and parameters.
Password changing and network-identifier.
Matching inputs and outputs with status and alarms.

Options

Redundant communications (MTF 900).
GPS/DGPS receptor.
Meteorologic, oceanographic and environmental sensor connexions.
Additional input and output expansion module.