• External ON/OFF power switch and authorization to release directly indicated on the radiosonde (led)
• Pressure calculated from the GNSS altitude, concept introduced by Meteomodem, this method is now recommended by the WMO
• Additional analog and digital sensors (XDATA), compatible CFH sensors, ECC Ozone, ...
• Process facilitated by a fully automatic preparation (frequency change, calibration, BIT and a simplified balloon train)
• Compatible with the Robotsonde automatic balloon launcher system (up to 24 radiosondes)
• Real-time processing of wet bubble effect
• On going GRUAN certification process

**Compatible with the EOSCAN software:**

The **M10** radiosonde is the Modem’s bestseller product for PTU and Wind data collection. Used in more than 60 countries around the world, the **M10** is a guarantee of quality and reliability of data.
## Technical specifications

### GENERAL
- **Dimensions**: 95 x 95 x 88.5 mm
- **Weight**: 150 g (including batteries)

### BATTERIES
- **Technology**: 1.5 V alkaline
- **Autonomy**: >4 h in flight
- **Package**: 4 batteries
- **Storage**: >3 years

### TEMPERATURE
- **Sensor type**: Thermistor
- **Measurement range**: +60 °C to -100 °C
- **Resolution**: 0.01 °C
- **Absolute accuracy**: ±0.3 °C
- **Repeatability**: ±0.1 °C
- **Reproducibility**: ±0.2 °C
- **Response time**: <1 s
- **Measurement rate**: 1 Hz

### GEOPOTENTIAL HEIGHT
- **Altitude range**: >45 km
- **Position**: ±5 m
- **Position resolution**: 0.01 m

### WIND MEASUREMENT
- **Horizontal wind accuracy**: 0.15 m/s
- **Wind direction accuracy**: 1 °
- **Horizontal wind resolution**: ±0.01 m/s
- **Wind direction resolution**: ±0.1 °

### TRANSMISSIONER
- **Compliant with european standard ETSI EN 302054
- **Frequency range**: 400 MHz to 406 MHz
- **Frequency step**: 200 kHz (option 100 kHz)
- **Frequency setting**: By infrared
- **Maximum drift**: 1 kHz
- **Maximum output power**: 200 mW
- **Modulation**: PSK
- **Transmission rate**: 1 Hz

### HUMIDITY
- **Sensor type**: Capacitor
- **Measurement range**: 0 % to 100 %
- **Resolution**: ±0.1 %
- **Absolute accuracy**: ±3 %
- **Repeatability**: ±2 %
- **Reproducibility**: ±2 %
- **Response time**: <2 s (1000 hPa, 20 °C)

### CALIBRATION
- **Factory calibration**: Stored on flash memory
- **Groundcheck**: Prior to launch

### PRESSURE
- **Calculated from GPS altitude
- **Range**: 1100 hPa to 3 hPa
- **Resolution**: ±0.1 hPa
- **Accuracy**: ±1.0 hPa from 1100 hPa to 100 hPa
- **±0.3 hPa from 100 hPa to 10 hPa
- **±0.1 hPa <10 hPa
- **Reproducibility**: ±0.2 hPa at 100 hPa
- **±0.05 hPa at 10 hPa

### OPTIONS
- **GLONASS compatibility**: (XDATA, OZONE, LOAC, ...)

### Messages

- Edition of WMO messages (**TEMP FM35, TEMP SHIP FM36, TEMP MOBIL FM38, TEMP DROP FM37, PILOT FM32, PILOT SHIP FM33, PILOT MOBIL FM34, CLIMAT TEMP FM75, BUFR 309052, BUFR HR 309052, BUFR DROP 309053, BUFR HR DROP 309053, BUFR PILOT PRESSURE 309050, BUFR PILOT ALTITUDE 309051)

- Edition of STANAG messages (**METCM - 4082, METB2/3 - 4061, METCFL, METTA - 4140, METK3 - 4082, METFM - 2103, MET11, METSR, EACMM**)

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