# SATELLINE®-M3-TR8

SATELLINE-M3-TR8 is a UHF data transceiver module in a lightweight single PCB structure. It is designed to be integrated into a host device.

The radio module configuration can be done with the SATEL SL-commands or SATEL Configuration Manager -software.
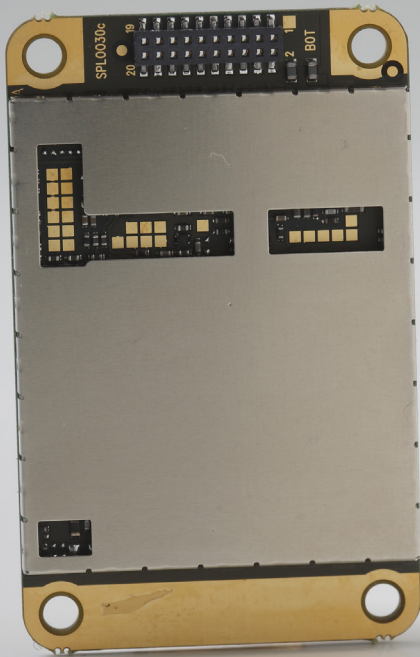
SATELLINE-M3-TR8 is compatible with widely used SATELLINE-EASy 869 radio modems.

Available as:

| |
|---|
| VHF |
| ▸ **UHF** |
| ▸ **Licence free** |
| NMS |
| IP67 |

Product type:

| |
|---|
| Classic |
| Smart |
| ▸ **OEM** |

Setting up a local data transfer network is quick and cost effective with SATEL radio modems. The wireless network is independent and free of operator services. The cost of operation is either free of charge or fixed, depending on the frequency used. SATELLINE radio modems are type-approved in over 50 countries.

SATELLINE radio modems are always on line and provide reliable, real-time data communications over distances ranging from tens or hundreds of metres up to around 80 kilometres. Thanks to a store and forward function, any radio modem in a network can be used as a master station, substation and / or repeater.

SATELLINE radio modem networks are flexible, easy to expand and can cover a wide variety of solutions from simple point-to-point connections to large networks comprising hundreds of modems. Even for expanded networks, only one operating frequency is required.

For the latest information, please visit www.satel.com

**SATEL**

SATELLINE-M3-TR8 is a flexible module which makes it a suitable unit for different uses. It is ready to use on the Pan-European licence free channels with default settings and is allocated for narrowband telemetry, alarm and data transfer applications.

Following items in the module can be customized upon request*:
- Mechanical fastening and its type
- Interface and antenna connector types

SATELLINE-M3-TR8 can be added to existing systems; it is compatible with widely used SATELLINE-EASy 869 radio modems.

The module can be manufactured with an option for 128-bit encryption on the air interface to ensure the privacy.

SATELLINE-M3-TR8 is supplied without a housing in PCB format with RF-shielding, facilitating installation in to the customer's own housing or into a host device.

*For larger orders also shape of the PCB can be customized. Please contact us to learn more about the customization options.

## Technical Specifications

SATELLINE-M3-TR8 complies with EN 300 220-2, EN 301 489-1, -3 and EN 60950-1.
Values are subject to change without notice.

| TRANCEIVER MODULE | |
|---|---|
| Frequency | 868...870 MHz |
| Channel Width | 25 kHz |
| Tuning Range | 2 MHz |
| Modulation | 4FSK |
| Carrier Power | 10, 20, 50, 100, 200, 500 mW programmable |
| Sensitivity BER < 10 E-3 (FEC ON) | -112 dBm |
| Data Speed of the Radio Interface | 19200 (25 kHz channel) |
| **DATA MODEM** | |
| Electrical Interface | CMOS-UART |
| Interface Connector | 1.27 mm pitch socket |
| Data Speed of Serial Interface | 9600 ... 115200 bps |
| Air Interface Encryption | AES128 |
| **GENERAL** | |
| Input Voltage | +4 Vdc |
| Power Consumption, Typical | 875 mW (Receive) 4.3 W (Transmit 500 mW) 260 mW (Sleep) |
| Temperature Range | -25 °C ... +55 °C (complies with the standards) -30 °C ... +65 °C functional -40 °C ... +80 °C storage |
| Antenna Connector | HIROSE U.FL compatible type (Adapter cables available for TNC, SMA, MCX, MMCX etc.) |
| Construction | PCB with RF-shielding |
| Size H x W x D mm Weigth | 57 x 36 x 6.7 mm (w. screw fasteners) 20 g |