SATELLINE-M3-TR8

For pan-European licence free 868-870 MHz channels or for Indian licence free 865-867 MHz channels.

SATELLINE-M3-TR8 is a UHF data transceiver module in a lightweight single board structure, operating in licence free frequency bands 868-870 / 865-867 MHz. It is designed to be integrated into a host device. SATELLINE-M3-TR8 is an ideal product for creating a cost-saving optimized solution for versatile applications.

SATELLINE-M3-TR8 is compatible with widely used SATELLINE-EASy 869 radio modems in Europe and in India on respective frequency bands.

SATELLINE-M3-TR8 supports AES128 encyption for secure data transmission. The radio module can be commanded and configured by using the external command interface or alternatively SATEL Configuration Manager PC software.

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. SATEL radio modems are type-approved in over 50 countries.

SATEL 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.

SATEL 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.

SATEL

Mission-Critical Connectivity

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

SATELLINE-M3-TR8 can be added also to existing systems that are using external SATELLINE-EASy 869 radio modems.

The module is manufactured with AES128-bit encryption support 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.

SATELLINE radio modules suit all kind of needs of OEM customers, no matter the level of customization. Please contact us or our nearest distributor for various possibilities to create the perfect customized solution for you needs.

Technical Specifications

SATELLINE-M3-TR8 (868-870) complies with the following international standards: EN 300 220-1, EN 301 489-1, -3 and EN 60950-1.
SATELLINE-M3-TR8 (865-867) complies with EN 300 113-1,-2.

	SATELLINE-M3-TR8 (868-870)	SATELLINE-M3-TR8 (865-867)
TRANSCEIVER MODULE		
Frequency	868...870 MHz	865...867 MHz
Channel Width	25 kHz	
Tuning Range	2 MHz	
Modulation	4FSK	
Carrier Power (programmable)	10, 20, 50, 100, 200, 500 mW	10, 20, 50, 100, 200, 500, 1000 mW
Sensitivity BER < 10 E-3 (FEC ON)	-107 dBm	
Data Speed of the Radio Interface	19200 bps (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	

	SATELLINE-M3-TR8 (868-870)	SATELLINE-M3-TR8 (865-867)
GENERAL		
Operating Voltage	+4 Vdc	
Power Consumption, Typical	875 mW (RX) 4.3 W (TX 500 mW) 260 mW (Sleep)	875 mW (RX) 5.6 W (TX 500 mW) 7.3W (TX1W) 300 mW (Sleep)
Temperature Range	-25 °C ... +55 °C (complies with the standards) -30 °C ... +60 °C functional -40 °C ... +80 °C storage	
Antenna Connector	HIROSE U.FL compatible type (Adapter cables available for TNC, SMA, MCX, MMCX)	
Construction	PCB with RF-shielding	
Size H x W x D mm Weight	57 x 36 x 6.7 mm (w. screw fasteners) 20 g	

Values are subject to change without notice.

SATEL

Mission-Critical Connectivity

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