

SATELLINE-M3 VHF

The SATELLINE-M3 is a small and light-weight radio modem designed for integration into the user's terminal equipment. The modem and transceiver are enclosed in an aluminium housing.

A special advantage of the VHF frequency band, is the wider coverage. With the same carrier power and antenna gain, the connection ranges are 30 to 50 per cent larger than those reached with an equivalent UHF radio modem.

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 re-peater.

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 net-works comprising hundreds of modems. Even for ex-panded networks, only one operating frequency is required.

SATEL, Meriniitynkatu 17 P.O.Box 142, FI-24101 Salo, FINLAND Tel. +358 2 777 7800 info@satel.com



Mission-Critical Connectivity

SATELLINE-3M VHF

In industrial applications, the SATELLINE-M3 is typically mounted inside an instrumentation cabinet equipped with a PLC and power supply, for example.

All the applicable radio, EMC and electrical safety requirements are met without any additional casing.

SATELLINE-M3 VHF is a remotely adjustable radio transceiver module controlled through the Master Station by the dedicated SATEL NMS software. In addition to ordinary communication functions, the NMS system offers configuration through radio, efficient diagnostics of the operating status of the radio module, and accumulation of operation statistics data.

SATELLINE-M3 transceiver modems are compatible with SATELLINE-3AS VHF modems operated on the same frequency range.

SATEL Oy keeps developing and extending the list of transceiver module options. For the latest information, please visit our website or contact us or our local representative.



	SATELLINE-M3 VHF
Frequency	135 174 MHz
Channel Width	12.5 / 25 kHz
Tuning Range	135 155 / 138 160 / 155 174 MHz
Carrier Power	0.1, 0.5, 1 W
Sensitivity BER < 10E-3 (FEC ON)	-115110 dBm
Adjacent Channel Selectivity (FEC ON)	>60 dB
Data Speed of Radio Interface	19200 bps (25 kHz channel) 9600 bps (12.5 kHz channel)
Data Speed of Serial Interface	300 – 38400 bps
Modulation	4FSK
Operating Voltage	+9 +30 Vdc
Power Consumption Save Modes	<1.5 W (Receive) <7.6 W (Transmit 1 W) 0.05 W typical (when DTR is "0")

Type of Emission	F1D
Communication Mode	Half-Duplex
Carrier Power Stability	+ 2 dB / -3 dB
Spurious Radiation	<2 nW
Intermodulation Attenuation	>60 dB
Electrical Interface	Port1 fixed: RS-232 Port2 options: RS-232 / 422 / 485 (Port2 is programmable)
Interface Connector	D15, female
Data format	Asynchronous data
Temperature range	-25 °C +55 °C (tests acc. to ETSI standards) -40 °C +75 °C (absolute minimum / maximum) -40 °C +85 °C (storage)
Antenna Connector	TNC or SMA, female
Construction	Aluminium housing
Size H x W x D / Weight	114 x 61 x 22 mm / 265 g

Values are subject to change without notice.

Distributor:

