SATEL UHF & Licence free Radio Modems



SATELLINE-EASy

SATELLINE-EASy is a state-of-the-art transceiver radio modem providing a compact and flexible solution for many different long range applications. It can be equipped with an LCD and push buttons for facilitating the configuration of the 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 **SATEL** Mission-Critical Connectivity





- SATELLINE-EASy has two operating voltage levels to choose and low power consumption.
- The channel spacings 12.5, 20 and 25 kHz are software-selectable and the output power of 1W enables long connection distances.
- It has a wide 90 MHz / 70 MHz tuning range and the operation frequency can be selected within the ranges 330...420 MHz and 403...473 MHz.
- SATELLINE-EASy complies with the EN 300 113, EN 301 489-1, -5, EN 60950-1 and FCC Part 90 specifications.
- SATELLINE-EASy is also available as an IP67 product with 35W output power. You can find more information about the product in the SATELLINE-EASy Pro.



SATELLINE-EASy 869

- SATELLINE-EASy 869 is ready to use on the Pan-European licence free channels with default settings. It is allocated for narrowband telemetry, alarm and data transfer applications.
- SATELLINE-EASy 869 complies the EN 300 220-1, -2, EN 301 489-1, -3 and EN 60950-1.

	SATELLINE-EASy	SATELLINE-EASy 869	
Frequency	330420 MHz / 403 473 MHz	869.400 870 MHz	
Channel Width	12.5 kHz / 20 kHz / 25 kHz (Software selectable)	25 kHz	
Tuning Range	90 MHz / 70 MHz	Details and limitations for frequencies and power are in the user manual	
Adjacent Channel Power	< -60 dBc	< -64 dBc	
Sensitivity BER < 10E-3 (FEC ON)	-114 dBm @ 12.5 kHz -111 dBm @ 25 kHz	-111 dBm	
Adjacent Channel Selectivity (FEC ON)	>47 dB @ 12.5 kHz >52 dB @ 25 kHz	>52 dB	
Data Speed of Radio Interface	19200 bps (25 kHz channel) 9600 bps (12.5 / 20 kHz channel)	19200 bps (25 kHz channel)	
Power Consumption Save Modes	<1.2 W (Receive) <7 W (Transmit 1 W) Sleep: 0.12 W / DTR: 10 mW	<1.2 W (Receive) <3.8 W (Transmit 0.5 W) Sleep: 0.12 W / DTR: 10 mW	
Modulation	4FSK, GMSK	4FSK	
Operating Voltage	+6 +30 Vdc	+6 +30 Vdc	
Carrier Power	100, 200, 500, 1000 mW	10, 20, 50,100, 200, 500 mW	
Frequency Error Tolerance	< 1 kHz	< 2.5 kHz	
Spurious Emission	< -100 dBm (RX), < -80 dBm on 3rd harmonics @ 1215 - 1240 MHz (TX)	< -57dBm (RX/TX)	

Values are subject to change without a notice.



SATELLINE-EASy radio modems are also available as radio modules (Size: 88 x 49 x 9 mm / 50 g). You can find more information about SATELLINE-M3-TR1 and SATELLINE-M3-TR1 869 in the module brochure.

Distributor:

GENERAL		
Blocking (FEC ON)	>86 dB	
Selectivity at ±50 kHz	>67 dB	
Type of Emission	F1D	
Communication Mode	Half-Duplex	
Carrier Power Stability	<± 1.5 dB	
Spurious Radiation	< 2 nW	
Intermodulation Attenuation	>60 dB	
Electrical Interface	Port1 fixed: RS-232 Port2 options: LVTTL, TTL or RS-232 / 422 (Port2 RS-232 / 422 is programmable)	
Interface Connector	D15, female	
Data Speed of Serial Interface	300 – 38400 bps	
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, 50 ohm, female	
Construction	Aluminium housing	
Size H x W x D / Weight	139 x 67 x 29 mm / 250 g	

