

# SATELLINE®-EASy

## Wireless World – Local Solution

SATELLINE-EASy is a state-of-the-art transceiver radio modem providing a compact and flexible solution for many different long range applications.

SATELLINE-EASy is equipped with all necessary features; such as 70 MHz tuning range (403...473 MHz) in one hardware, selectable channel spacing and low power consumption either with +3...+9 Vdc or +6...+30 Vdc voltage level ranges. The configuration of the radio modem can be made with a terminal program or a Configuration Manager, provided by SATEL.

SATELLINE-EASy is compatible with widely used SATELLINE-3AS product line and also with SATEL additional equipment e.g. SATEL-LINK products.

VHF with NMS
UHF with NMS
<b>UHF</b>
Licence Free
IP67
OEM

SATELLINE-EASy can be equipped with a LCD and push-buttons for facilitating the configuring of the radio modem.



With SATEL radio modems, setting up a local data transfer network is quick and cost effective. Your 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. For the latest information, please visit our website [www.satel.com](http://www.satel.com).

SATELLINE radio modems are always on line and provide reliable, real-time data communications over distances ranging from tens 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.



## LOTS OF USER CHOICES

The available operating voltage has often an effect on the choice of system components. This has been taken into account when designing the SATELLINE-EASy; it has two operating voltage levels as an order options:

Option 1: +3...+9 Vdc

Option 2: +6...+30 Vdc.

To offer the user more flexibility, the EASy is compatible with the widely used SATELLINE-3AS radio modem family.

The channel spacings 12.5, 20 and 25 kHz are software-selectable. Thanks to the good receiver sensitivity, the output power of 1W enables long connection distances.

In order to offer easy logistic to customers the SATELLINE-EASy has a wide 70 MHz tuning range. End-users can select the operation frequency within the range 403...473 MHz.

## TECHNICAL SPECIFICATIONS

SATELLINE-EASy complies with the following international standards: EN 300 113-2 (Annex A), EN60950 (Safety), EN 301 489 (EMC), FCC CFR47 part 90

	SATELLINE-EASy	SATELLINE-3AS(d) Corresponding Values
<b>TRANSCEIVER</b>		
Frequency Range	403 ... 473 MHz	360 ... 470 MHz
Tuning Range	70 MHz	+/- 2 MHz from fixed central freq.
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz (Selectable)	12.5 kHz / 20 kHz / 25 kHz (Fixed)
Frequency Stability	< 1 kHz	< +/- 1.5 kHz
Type Of Emission	F1D	F1D
Communication Mode	Half-Duplex	Half-Duplex
Spurious Emission	< -100 dBm (RX) < -80 dBm on 3rd harmonics @ 1215 - 1240 MHz (TX)	Acc.to EN 300 220-1 / EN 300 113-1
Modulation	4FSK , GMSK	4FSK , GMSK
<b>TRANSMITTER</b>		
Carrier Power	100, 200, 500, 1000 mW	10 ... 1000 mW
Carrier Power Stability	< ± 1.5 dB	+2 dB / -3 dB
Adjacent Channel Power	Acc.to EN 300 113 / CRF47 part 90	Acc.to EN 300 220-1 / EN 300 113-1 / CRF47 part 90
<b>RECEIVER</b>		
Sensitivity BER < 10E-3 (FEC ON)	-114 dBm @ 12.5 kHz -111 dBm @ 25 kHz	< -115 dBm
Adjacent Channel Selectivity (FEC ON)	> 47 dB @ 12.5 kHz > 52 dB @ 25 kHz	> 60 dB @ 12.5 kHz > 70 dB @ 25 kHz
Selectivity at ±50 kHz	> 67 dB @ 12.5 / 25 kHz	> 70 dB @ 12.5 / 25 kHz
Blocking (FEC ON)	> 86 dB	> 84 dBm
Intermodulation Attenuation	> 60 dB	> 65 dB
<b>DATA MODEM</b>		
Electrical Interface	Port1 fixed: RS-232 Port2 options: LVTTTL, TTL or RS-232 / 422 (Port2 RS-232 / 422 selectable) RS-485 by external wiring	Port1 fixed: RS-232 Port2 options: RS-232, RS-485 or RS-422
Interface Connector	D15, female	D15, female
Data Speed of Serial Interface	300 - 38400 bps	300 - 38400 bps
Data Speed of Radio Interface	19200 bps (25 kHz channel) 9600 bps (12.5 / 20 kHz)	19200 bps (25 kHz channel) 9600 bps (12.5 / 20 kHz channel)
Data Format	Asynchronous data	Asynchronous data
<b>GENERAL</b>		
Operating Voltage	Option 1: +3 ... +9 Vdc Option 2: +6 ... +30 Vdc	+9 ... +30 Vdc
Power Consumption, Typical	1.2 W (Receive) 7 W (Transmit)	1.5 W (Receive) 5.5 W (Transmit)
Save Modes	Sleep: 0.24 W / DTR: 5 mW	DTR: 50 mW
Temperature Range	-25 °C ... +55 °C (complies with the standards) -30 °C ... +65 °C functional -40 °C ... +80 °C storage	-25 °C ... +55 °C tests acc.to ETSI -40 °C ... +75 °C functional -40 °C ... +85 °C storage
Antenna Connector	TNC, 50 ohm, female	TNC, 50 ohm, female
Construction	Aluminium housing	Aluminium housing
Size H x W x D mm / Weight	137 x 67 x 29 mm / 250 g	137 x 67 x 29 mm / 260 g

Values are subject to change without notice.

Manufacturer:



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