SATELLINE®-EASy Pro

Wireless World – Local Solution

SATELLINE-EASy Pro is an IP67 (NEMA 6) classified UHF radio modem with a high power (up to 25 or 35 W) transmitter and wide 70 MHz tuning range. It was designed for easy mobile use in demanding field conditions. According to the IP67 standard, the casing and connectors of the SATELLINE-EASy Pro are waterproof and secured against dust.

In addition to the high output power and wide tuning range, the channel spacing is also selectable to be 12.5, 20 or 25 kHz. The SATELLINE-EASy Pro is equipped with a Liquid Crystal Display (LCD) and a keypad, used to indicate the current operating status, as well as for changing the operating channel and power level of the radio modem.

VHF with NMS
UHF with NMS
UHF
Licence Free
IP67
Customer Specific

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.

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.

Heavy-duty tool for outdoor use

SATELLINE-EASy Pro is an IP67 classified UHF radio modem with a high power (up to 25 or 35 W) transmitter, wide 70 MHz tuning range (403 ... 473 MHz) in one hardware and selectable channel spacing.

SATELLINE-EASy Pro is particularly well suited for mobile field applications (land surveying, for instance) under varying weather conditions. Due to the high transmitting power, connection distances more than 80 kilometres can be covered in favourable conditions.

With the Liquid Crystal Display (LCD) the user can monitor the current operating status (frequency, channel number) as well as condition (power level, voltage level, field strength) of the radio modem.

SATELLINE-EASy Pro is compatible with SATELLINE-EASy and -3AS family products too.

Dependable data transfer

In the SATELLINE-EASy Pro the error rate is minimized by means of advance checking and correction of the data packets. In Forward Error Correction (FEC), the data packets are split in several blocks. The radio modem adds correction information inside the blocks during transmission.

In a SATELLINE-EASy Pro network, any substation can function as a repeater, too. In this operating mode (store and forward), the radio modem receives a message, buffers the received data, and transmits it further to another substation, using the same radio channel as in reception.

SATELLINE-EASy Pro features embedded Message Routing software, which takes care of routing messages across a radio modem network automatically after proper settings have been made. Communication is completely transparent, which makes Message Routing directly compatible with most user protocols.

Expert's help always at hand

With an experience of over twenty years, SATEL Oy has grown to one of the leading radio modem manufacturers in the world. As a result of our persistent and innovative work in both product design and international marketing, we now possess extremely large selection of radio modems, and operate through an extensive and skilled distributor network all over the world. We have also accumulated a considerable amount of know-how in different radio modem applications. So, whatever your application is, do not hesitate to ask for expert's help whenever needed.

SATELLINE radio modems have been used, for example, at airports and in waterworks and electricity plants for different monitoring and control applications, as well as to set up location data based fleet management systems in cities. For further information about our products and their applications, please see our home page www.satel.com or contact your local dealer.

Manufacturer:

◈ SATEL®

SATEL Oy
Meriniitynkatu 17, P.O. Box 142,
FI-24101 Salo, FINLAND

Tel. +358 2 777 7800   info@satel.com
Fax +358 2 777 7810   www.satel.com

Technical specifications SATELLINE-EASy Pro

SATELLINE-EASy Pro complies with the following international standards: EN 300 113-1, -2, EN 301 489-1, -5, IEC 60950 and FCC CFR47 section 90.

TRANSCEIVER

Frequency Range	403...473 MHz
Tuning Range	70 MHz
Channel Spacing	12.5 / 20 / 25 kHz (SW selectable)
Frequency Error Tolerance	< 1 kHz
Type of Emission	F1D
Communication Mode	Half-Duplex

TRANSMITTER

Carrier Power	10, 20, 25 or 35 W / 50 ohm (Default) 5, 10, 20 or 25 W / 50 ohm (Option *)
Carrier Power Stability	(+ 2 dB / - 3 dB)
TX Duty Cycle ** 35 W 10 W	100 % (22 °C / 35 °C) 40 % 20 min / 13 min no limit no limit / 50 min no limit

RECEIVER

Sensitivity	< -114 dBm (BER < 10 E-3) ***
Co-channel Rejection	> -12 dB
Adjacent Channel Selectivity	> 47 dB @ 12.5 kHz / > 52 dB @ 25 kHz
Intermodulation Attenuation	> 60 dB
Spurious Radiation	< 2 nW

DATA MODEM

Interface	RS-232
Interface Connector	Waterproof IP67, 8-pin ODU
Data Speed of RS Interface	300 – 38400 bps
Data Speed of Radio Interface	19200 bps (25 kHz)
	9600 bps (12.5 / 20 kHz)
Data Format	Asynchronous RS-232

GENERAL

Operating Voltage ****	+9 ... +16 Vdc
Operating voltage feeding	4-pin ODU MINI-Snap Size 1
Power Consumption (average)	1.8 W typical (Receive)
	120 W typical (Transmit 35W output power) 100 W typical (Transmit 25W output power)
	0.4 W typical (Sleep State)
Temperature Range - Operating	-25 °C … +55 °C
	-40 °C … +75 °C (absolute minimum / maximum)
- Storage	-40 °C … +85 °C
Antenna Connector	TNC, 50 ohm, female
Construction	Aluminium Enclosure
Size H x W x D	189 x 138 x 71 mm (with connectors)
Weight	1420 g
IP Classification	IP67 (NEMA 6)

Values are subject to change without notice.
* Limited output power is available as on order option.
** If high output power is used continuously or with a high duty cycle, the equipment generates excess heat. The output power is automatically decreased when necessary to prevent overheating. Typical operating times are shown in the chart with different output powers and duty cycles @ 22°C and 35°C.
*** Depends on receiver settings.
**** ≥ +12 Vdc @ 35 W output power

Distributor:

TOPO TRADE
Strada IACOB NEGRUZZI nr. 44, 011094, Bucuresti-1
(+40)722 620 305
e-mail:topotrade@yahoo.com
www.topotrade.ro