SATELLINE®-3ASd Epic Pro

Wireless World – Local Solution

The SATELLINE-3ASd Epic Pro is an IP67 (NEMA 6) classified UHF radio modem with a high power (10 W) transmitter. It was designed for easy mobile use in demanding field conditions. According to the IP67 standard, the casing and connectors of the SATELLINE-3ASd Epic Pro are waterproof and secured against dust.

The SATELLINE-3ASd Epic Pro is equipped with a Liquid Crystal Display (LCD) and a keypad, which are used to indicate the current operating status and to change the operating channel and power level of the radio modem.

VHF with NMS
UHF with NMS
UHF
Licence Free
IP67
OEM

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.

All SATELLINE radio data modems fulfil RoHS requirements (EU directives 2002/95/EC and 2002/96/EU) as of 1 July 2006.

SATEL®

A heavy-duty tool for outdoor use

The SATELLINE-3ASd Epic Pro is particularly well suited for mobile field applications (land surveying, for instance) under varying weather conditions. Due to its high transmitting power, connection distances of up to 80 kilometres can be covered.

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.

Dependable data transfer

In the SATELLINE-3ASd Epic Pro the error rate is minimised 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-3ASd Epic Pro network, any substation can also function as a repeater. 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.

The SATELLINE-3ASd Epic Pro features embedded Message Routing software, which ensures that messages are routed automatically across a radio modem network after proper settings have been made. Communication is completely transparent, which makes Message Routing directly compatible with most user protocols.

The SATELLINE-3ASd Epic Pro is available also as a special "Dual Band" variant. The transceiver of the radio modem offers as an option two 2 MHz frequency bands, tuned at the factory with a maximum separation of 15 MHz between the highest and the lowest frequency. The radio modem can be reprogrammed to operate at any channel within those two bands.

Expert's help always at hand

With over 20 years of experience, SATEL Oy has grown into 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 offer an extremely large selection of radio modems, and operate through an extensive and skilled distributor network all over the world.

SATEL Oy is an ISO 9001:2008 and ISO 14001:2004 certified company. The quality of our operations and products is kept as flawless and at as high level as possible.

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 our expert help whenever you need it. SATELLINE radio modems have been used, for example, at airports, waterworks and electricity plants for various monitoring and control applications, as well as to set up location data-based fleet management systems in cities.

SATEL Oy has prepared an extensive set of Application Notes describing the different ways of utilising SATEL radio modems in various applications. For further information about our products and their applications, please visit our home page www.satel.com or contact your local dealer.

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Technical specifications SATELLINE-3ASd Epic Pro

SATELLINE-3ASd Epic Pro complies with the following international standards: EN 300 113-2, EN 301 489-1, -5, EN 60950-1 and FCC CFR47 section 90.

TRANSCEIVER	
Frequency Range	330 ... 470 MHz
Tuning Range	+/- 2 MHz from central frequency
Channel Spacing	12.5 kHz / 20 kHz / 25 kHz
Number of Channels	160 / 100 / 80
Frequency stability	< 1.5 kHz
Type of Emission	F1D
Communication Mode	Half-Duplex
TRANSMITTER	
Carrier Power	1, 5 or 10 W / 50 ohm
Carrier Power Stability	+2 dB / -3 dB
RECEIVER	
Sensitivity	< -115 dBm (BER < 10 E-3)
Co-channel Rejection	> -12 dB
Adjacent Channel Selectivity	> 60 dB / > 70 dB
Intermodulation Attenuation	> 65 dB
Spurious Radiation	< 2 nW
DATA MODEM	
Interface	RS-232
Interface Connector	8-pin ODU, waterproof
Data speed of RS interface	300 - 38400 bps
Data speed of radio interface	19200 bps (25 kHz channel)
	9600 bps (12.5 / 20 kHz channel)
Data format	Asynchronous RS-232
GENERAL	
Operating voltage	+11.8 ... +30 Vdc
Power consumption (average)	1.6 W typical (Receive)
	32 W typical (Transmit)
	0.1 W typical (when DTR is "0")
Temperature range - Operating	-25 °C...+55 °C (tests acc. to ETSI standards)
	-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	165 x 138 x 57 mm
Weight	1300 g
IP Classification	IP67 (NEMA 6)

Values are subject to change without notice.

Distributor: