



# SATEL EASy-Proof

SATEL EASy-Proof is a versatile data radio modem providing a flexible solution for applications that require reliable data transfer. It has IP69K sealed housing and connectors to ensure the functionality even under extremely harsh environmental conditions (e.g. construction equipment, precision farming, all-terrain vehicles, automotive and marine).

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 repeater.

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 networks comprising hundreds of modems. Even for expanded 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**



## SATEL EASy-Proof

SATEL EASy-Proof is IP69K\* classified product that is based on SATELLINE-EASy.

Compact size, wide (90 / 70 MHz) tuning and operating voltage (+6...+30 Vdc) ranges combined with IP69K\* sealed housing and connectors make this device a perfect match to systems where the high quality communication and the modularity are valued.

12.5, 20 and 25 kHz channel widths are softwareselectable. The output power of 1W enables long connection distances.

SATEL EASy-Proof is compatible with SATELLINE modems and supports GMSK based communication protocol.

*\*IP69K-classification is designed for products that need to stand high pressure and hot water. IP69 is an additional sealing level define to protect an envelope from intense water jets for short duration (Typically for high pressure cleaning).*

### Technical Specifications

The equipment complies with the EN 300 113, EN 301 489-1, -5, EN 60950-1 and FCC Part 90 specifications.

SATEL EASy-Proof	
Frequency Range	330...420 MHz / 403... 473 MHz
Channel Width	12.5 kHz / 20 kHz / 25 kHz (Programmable)
Tuning Range	90 MHz / 70 MHz
Adjacent Channel Power	< -60 dBc
Sensitivity BER < 10E-3 (FEC ON) NOTE*	-114 dBm @ 12.5 kHz -111 dBm @ 25 kHz
Adjacent Channel Selectivity (FEC ON)	>47 dB @ 12.5 kHz >52 dB @ 25 kHz
Data Speed of Radio Interface	19200 bps (25 kHz channel) 9600 bps (12.5 kHz channel)
Power Consumption, Save Modes	<1.2 W (Receive) <3 W (Transmit @ 0.5 W) <7 W (Transmit @ 1 W) Sleep: 0.12 W/ DTR: 10 mW
Modulation	4FSK, GMSK
Operating Voltage	+6 ... +30 Vdc
Carrier Power	100, 200, 500, 1000 mW
Spurious Emission	< -100 dBm (RX), < -80 dBm on 3rd harmonics @ 1215 - 1240 MHz (TX)

Values are subject to change without notice.

GENERAL	
Blocking (FEC ON)	> 86 dB
Selectivity at ±50 kHz	> 67dB
Frequency Stability	<1 kHz
Type Of Emission	F1D
Communication Mode	Half-Duplex
Carrier Power Stability	<± 1.5 dB
Spurious Radiation	<2 nW
Intermodulation Attenuation	>60 dB
Electrical Interface	RS-232
Interface Connector	Deutsch DT04-6P-CL09
Data Speed of Serial Interface	300 - 38400 bps
Data Format	Asynchronous data
Temperature Range	-25...+55 °C (Complies with standards) -30...+65 °C (Functional) -40...+75 °C (Absolute min./max.) -40...+85 °C (Storage)
Antenna Connector	TNC
Construction	Aluminium
Ingress protection	69K
Size H x W x D mm / Weight	176 x 95 x 42 mm / 460 g

Distributor:

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[www.satel.com](http://www.satel.com)