

# Solutions for the toughest challenges

Quality radio modems for wireless data communication



## SATELLINE-4Pro

SATELLINE-4Pro is particularly well suited for mobile field applications under varying weather conditions. Due to the high transmitting power, connection distances over 80 kilometers can optimally be covered. SATELLINE-4Pro uses Forward Error Correction (FEC); advance checking and correction of the data packets minimize the error rate.

In SATELLINE-4Pro network any substation can function as a repeater. In this store and forward operating mode, 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-4Pro is compatible with SATELLINE-EASy products.

## GNSS

SATEL's radio modems and modules offer a first-class solution for GNSS RTK, remote measurement and control applications. They are used e.g. in land surveying, precision farming, machine control, harbor logistics and port cranes.

# SATEL

Mission-Critical Connectivity

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

SATEL is one of the world's leading experts and innovators of radio modems for wireless data communication. Our solutions are used in wide range of industrial applications. We are known for our high quality, expertise, service and support.

You can contact us directly or get in touch with your local distributor.

## For heavy-duty outdoor use

SATELLINE-4Pro is an IP67 (NEMA 6) classified UHF radio modem with a high power transmitter (35 W), high data speed (28.8 kbps), wide tuning range and selectable channel spacing. It is designed for easy mobile use in demanding field conditions. IP67 ensures it is waterproof and secured against dust.

With the Liquid Crystal Display (LCD) and a keypad the user can monitor the current operating status (frequency and channel number) and power level, voltage level and field strength.



### SATELLINE-4Pro

SATELLINE-4Pro complies with the following international standards: FCC CFR47 part 90 and RSS-119 Issue 12

#### TRANSCEIVER

Frequency	406.180...470.000 MHz
Channel Width	12.5 / 25 kHz (Software selectable)

#### TRANSMITTER

Carrier Power	2, 10, 20, 25 or 35 W / 50 ohm	
TX Duty Cycle*	100 % (22 °C / 35 °C)	40 %
35 W	20 min / 13 min	no limit
10 W	no limit / 50 min	no limit

#### RECEIVER

Sensitivity	< -117 dBm (BER < 10 E-3)**
-------------	-----------------------------

#### DATA MODEM

Interface	RS-232
Data Speed of Serial Interface	9600 – 115200 bps
Data Speed of Radio Interface	28800 bps (25 kHz) 14400 bps (12.5 kHz)
Data Format	Asynchronous RS-232
Modulation	4FSK, 8FSK, 16FSK, GMSK (PacificCrest, TRIMTALK***)

#### GENERAL

Input Voltage****	+9 ... +16 Vdc
Connectors	4-pin ODU (power), 8-pin ODU (data), TNC 50 ohm female (antenna)
Power Consumption (average)	< 1.8 W typical (Receive) 120 W typical (Transmit 35 W output power) 100 W typical (Transmit 25 W output power) 0.4 W typical (Sleep State)
Temperature Range - Operating	-30 °C ... +60 °C -40 °C ... +75 °C (absolute min / max)
Construction	Aluminium Enclosure
Size H x W x D	189 x 138 x 71 mm (w. connectors)
Weight	1420 g

Values are subject to change without notice.

\* 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.

\*\*\* TRIMTALK is a trademark of Trimble Navigation Ltd.

\*\*\*\* ≥ +12 Vdc @35 W output power