

# SATEL RADIO COMPARISON

	SATEL-EASy Pro*	SATELLINE-EASy Pro	SATEL-EASy*	SATELLINE-EASy	SATEL EASy-Proof
<b>TRANSCEIVER</b>					
Frequency MHz	403...473	403...473	403...473	330...420 / 403...473	330...420 / 403...473
Tuning range	70 MHz	70 MHz	70 MHz	90 / 70 MHz	90 / 70 MHz
Channel spacing (6.25 kHz channel raster)	25, 20*), 12.5 kHz Selectable	25, 20*), 12.5 kHz Selectable	25, 20*), 12.5 kHz Selectable	25, 20*), 12.5 kHz Selectable	25, 20*), 12.5 kHz Selectable
*) Uses 12.5 kHz channel width, 10 kHz channel raster					
<b>TRANSMITTER</b>					
Carrier power	1...35 / 1...25 W	10...35 / 5...25 W	0.01...1 W	0.1...1 W	0.1...1 W
<b>RECEIVER</b>					
Sensitivity**) FEC ON, 4FSK (BER<10E-2)	-114 dBm	-114 dBm	-115 dBm	-114 dBm	-114 dBm
**) Depends on receiver settings					
<b>DATA MODEM</b>					
Interface level	RS-232, RS-422, RS-485	RS-232	RS-232, RS-422, RS-485 Ask availability: USB, ETH, BT	RS-232, RS-422	RS-232
Interface	One port for data / Two ports: data and NMS	One port for data	Two ports: data and NMS	One port for data	One port for data
Interface connector	8-pin ODU ***)	8-pin ODU ***)	D15, female	D15, female	Deutsch DT04-6P-CL09
Data speed of RS interface bps	9600...115200	300...38400	1200...115200	300...38400	300...38400
Data speed of radio interface bps ****)	28800 / 14400	19200 / 9600	28800 / 14400	19200 / 9600	19200 / 9600
***) Separate operating voltage feeding through 2-pin ODU (EASy Pro+) / 4-pin ODU MINI-snap size1 (EASy Pro) connector					
****) Max speeds, depends on channel spacing and modulation					
<b>GENERAL</b>					
Operating voltage range, Vdc	+9...+30 (-15 % / +20 %)	+10.6...+13.3 (-15 % / +20 %)	+7...+27.5 (-15 % / +20 %)	+3.5...+7.5 / +7...+25 (-15 % / +20 %)	+7...+25 (-15 % / +20 %)
Power consumption	<2.3 W (RX) <97 W (TX)	<1.8 W (RX) <120 W (TX)	<1.4 W (RX) <6.0 W (TX)	<1.2 W (RX) <7.0 W (TX)	<1.2 W (RX) <7 W (TX)
Antenna connector, 50 Ω	TNC, female	TNC, female	TNC, female	TNC, female	TNC, female
Weight	1400 g	1420 g	<350g	250 g	460 g
Size H x W x D	180 x 138 x 71 mm	189 x 138 x 71 mm	138 x 67 x 29 mm	139 x 67 x 29 mm	176 x 95 x 42 mm
Standards:					
EN 300 113	•	•	•	•	•
EN 301 489	•	•	•	•	•
IEC 62368	•	-	•	•	•
IEC 60950	-	•	-	•	•
FCC Part 90	•	•	•	•	•
Typical line of sight distance	>30 km	>30 km	20 km	20 km	20 km
Compatibility with other SATEL modems	EASy+, EASy family, 3AS NMS, modules *****)	EASy+, Pro+, EASy family, modules *****)	3AS NMS, Pro+, EASy family, modules *****)	EASy+, Pro+, EASy family, modules *****)	EASy+, Pro+, EASy family, modules *****)
Compatibility with other manufacturers' radio protocols	•	•	•	•	•
*****) Check from SATEL different module types					
Values are subject to change without notice.					

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	SATELLINE-3AS VHF	SATELLINE-EASy 869	SATEL Compact-Proof (869)	SATEL Compact-Proof	SATEL Proof-TR4+/TR9
<b>TRANSCEIVER</b>					
Frequency	135...174 MHz	869.400 ... 870 / 865 ... 867 MHz	869.400 ... 870 / 865 ... 867 MHz	330...420 / 403...473 MHz	403...473 / 902...928 MHz
Tuning range	135...155, 138...160, 155...174	Details and limitations for frequencies and power are in the user manual		90 / 70 MHz	70 MHz / 26 MHz
Channel spacing (6.25 kHz channel raster)	25, 20*), 12.5 kHz	25 kHz (NOTE! 12.5 kHz channel raster)	25 kHz (NOTE! 12.5 kHz channel raster)	25, 20*), 12.5 kHz Selectable	25, 20*), 12.5 kHz Selecta- ble / Frequency hopping
*) Uses 12.5 kHz channel width, 10 kHz channel raster					
<b>TRANSMITTER</b>					
Carrier power	0.1...5 W	0.01 ... 0.5 W / 0.01 ... 1 W	0.01 ... 0.5 W / 0.01 ... 1 W	0.1...1 W	0.01...1 W
<b>RECEIVER</b>					
Sensitivity**) FEC ON, 4FSK (BER<10E-2)	-115 dBm	-111 dBm	-111 dBm	-114 dBm	-115 dBm
**) Depends on receiver settings					
<b>DATA MODEM</b>					
Interface level	RS-232, RS-422, RS-485	RS-232, RS-422	RS-232	RS-232	RS-232
Interface	Two ports: data and NMS	One port for data	One port for data	One port for data	One port for data
Interface con- nector	D15, female	D15, female	8-pin ODU ***)	8-pin ODU ***)	Deutsch DT04-6P-CL09
Data speed of RS interface bps	1200...38400	300...38400	300...38400	300...38400	9600...115200
Data speed of radio interface	19200 / 9600 bps ****)	19200 bps	19200 bps	19200 / 9600 bps ****)	28800 / 115200 bps ****)
****) Separate operating voltage feeding through 4-pin ODU MINI-snap size1 connector *****) Max speeds, depends on channel spacing and modulation					
<b>GENERAL</b>					
Operating voltage range Vdc	+10.6...+25 (-15 % / +20 %)	+7...+25 (-15 % / +20 %)	+10.6...+13.3 (-15 % / +20 %)	+10.6...+13.3 (-15 % / +20 %)	+7...+27.5 (-15 % / +20 %)
Power consumption, typical	<1.7 W (RX) <6.6 W @ 1W (TX) <22 W @ 5W (TX)	<1.2 W (RX) <3.8 W (TX)	<1.2 W (RX) <3.8 W (TX)	<1.2 W (RX) <7.0 W (TX)	<1.32 W (RX) 4...7 W (TX)
Antenna connec- tor 50 Ω	TNC, female	TNC, female	TNC, female	TNC, female	TNC, female
Weight	265 g 550 g with heatsink	250 g	850 g w battery 520 g w/o battery	850 g w battery 520 g w/o battery	<500 g
Size H x W x D	139 x 67 x 29 mm 139 x 80 x 56 mm	139 x 67 x 29 mm	187 x 84 x 50 mm	187 x 84 x 50 mm	174 x 95 x 46 mm
Standards:					
EN 300 113	•	-	-	•	•
EN 300 220	-	•	•	-	-
EN 301 489	•	•	•	•	•
Safety	IEC 60950	IEC 60950	IEC 60950	IEC 60950	IEC 62368
FCC Part 90	•	-	-	•	•
Typ. line of sight distance	30 km	<10 km	<10 km	20 km	20 km
Compatibility	-	Compact-Proof (869), modules ****)	EASy 869, modules *****)	EASy+, Prot+, EASy family, modules *****), other manufac- turers' radio protocols	EASy+, Prot+, EASy family, modules *****), other man- ufacturers' radio protocols
*****) Check different module types from SATEL					
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