

SATEL RADIO COMPARISON

	SATELLINE-4Pro	SATELLINE-EASy Pro	SATEL-EASy+	SATELLINE-EASy	SATEL EASy-Proof
TRANSCEIVER					
Frequency MHz	406.18...470	403...473	403...473	330...420 / 403...473	330...420 / 403...473
Tuning range	63.82 MHz	70 MHz	70 MHz	90 / 70 MHz	90 / 70 MHz
Channel spacing (6.25 kHz channel raster)	25, 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					
TRANSMITTER					
Carrier power	2...35 W	10...35 / 5...25 W	0.1...1 W	0.1...1 W	0.1...1 W
RECEIVER					
Sensitivity**) FEC ON, 4FSK (BER<10E-2)	-116 dBm	-114 dBm	-115 dBm	-114 dBm	-114 dBm
**) Depends on receiver settings					
DATA MODEM					
Interface level	RS-232	RS-232	RS-232, RS-422, RS-485 Ask availability: USB, ETH, BT	RS-232, RS-422	RS-232
Interface	One port for data	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 4-pin ODU MINI-snap size1 connector					
****) Max speeds, depends on channel spacing and modulation					
GENERAL					
Operating voltage Vdc	+9...+16	+9...+16	+6...+30	+3...+9 / +6...+30	+6...+30
Power consumption	<1.8 W (RX) <120 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	1420 g	1420 g	<350g	250 g	460 g
Size H x W x D mm	189 x 138 x 71	189 x 138 x 71	139 x 67 x 29	139 x 67 x 29	176 x 95 x 43
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, modules *****)	EASy+, EASy family, modules *****)	3AS NMS, EASy family, modules *****)	EASy+, EASy family, modules *****)	EASy+, 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 Compact-4BT	SATEL Proof-TR4/TR9
TRANSCEIVER						
Frequency	135...174 / 218...238 MHz	869.400 ... 870 / 865 ... 867 MHz	869.400 ... 870 / 865 ... 867 MHz	330...420 / 403...473 MHz	403...473 MHz	403...473 / 902...928 MHz
Tuning range	135...155, 138...160, 155...174, 218...238	Details and limitations for frequencies and power are in the user manual		90 / 70 MHz	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, 12.5 kHz Selectable	25, 20*), 12.5 kHz Selectable / Frequency hopping
*) Uses 12.5 kHz channel width, 10 kHz channel raster						
TRANSMITTER						
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	0.1...1 W	0.1...1 W (TR4) 0.01...1 W (TR9)
RECEIVER						
Sensitivity**) FEC ON, 4FSK (BER<10E-2)	-115 dBm	-111 dBm	-111 dBm	-114 dBm	-116 dBm	-116 dBm
**) Depends on receiver settings						
DATA MODEM						
Interface level	RS-232, RS-422, RS-485	RS-232, RS-422	RS-232	RS-232	RS-232 USB, BT	RS-232
Interface	Two ports: data and NMS	One port for data	One port for data	One port for data	Port for data and for BT	One port for data
Interface connector	D15, female	D15, female	8-pin ODU ***)	8-pin ODU ***)	M12 circular	Deutsch DT04-6P-CL09
Data speed of RS interface bps	1200...38400	300...38400	300...38400	300...38400	9600...115200	1200...115200 / 9600...115200
Data speed of radio interface	19200 / 9600 bps ****)	19200 bps	19200 bps	19200 / 9600 bps ****)	28800 / 14400 bps ****)	28800 / 115200 bps ****)
) Separate operating voltage feeding through 4-pin ODU MINI-snap size1 connector *) Max speeds, depends on channel spacing and modulation						
GENERAL						
Operating voltage Vdc	+9...+30	+6...+30	+9...+16	+9...+16	+12...+30	+6...+30
Power consumption	<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) <5.8 W (TX)	<1.0 W (RX) <4...7 W (TX)
Antenna connector 50 Ω	TNC, female	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	420 g	460 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	165 x 55 x 55 mm	176 x 95 x 43 mm
Standards:						
EN 300 113	•	-	-	•	•	•
EN 300 220	-	•	•	-	-	-
EN 301 489	•	•	•	•	•	•
Safety	IEC 60950	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	20 km
Compatibility	-	Compact-Proof (869), modules *****)	EASy 869, modules *****)	EASy+, EASy family, modules *****), other manufacturers' radio protocols	EASy+, EASy family, modules *****), other manufacturers' radio protocols	EASy+, EASy family, modules *****), other manufacturers' radio protocols
*****) Check different module types from SATEL						
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