

# SATELLINE / SATEL Radio Modem Comparison

	SATELLINE-1870E	SATELLINE-EASy 869	SATEL Compact-Proof (869)	SATEL Compact-Proof	SATEL Compact-4BT	SATEL Proof-TR4/TR9
<b>TRANSCEIVER</b>						
Frequency MHz	869.4125 ... 869.6375	869.4125 ... 869.6375	869.4125 ... 869.6375	330...420 / 403...473	403...473	403...473 / 902...928
Tuning range	10 channels	10 channels	10 channels	90 / 70 MHz	70 MHz	70 MHz / 26 MHz
Channel spacing kHz	25	25	25	25, 20*), 12.5, 6.25*) Selectable	25, 20*), 12.5, 6.25*) Selectable	25, 20*), 12.5, 6.25*) Selectable / Frequency hopping
*) Uses 12.5 kHz channel width						
<b>TRANSMITTER</b>						
Carrier power / 50 Ω	5...500 mW	10...500 mW	10...500 mW	0.1...1 W	0.1...1 W	0.1...1 W
<b>RECEIVER</b>						
Sensitivity (BER<10E-3)	<108 dBm	<111 dBm	<111 dBm	<114 dBm	<116 dBm	<118 dBm
<b>DATA MODEM</b>						
Interface level	RS-232	RS-232 LVTTL, TTL RS-422	RS-232	RS-232	RS-232 USB BT	RS-232
Interface	One port for data	One port for data	One port for data	One port for data	Port for data and for BT	One port for data
Interface connector	DIN41651-16-pin male	D15, female	8-pin ODU ***)	8-pin ODU ***)	M12 circular	Deutsch DT04-6P-CL09
Data speed of RS interface bps	300...19200	300...38400	300...38400	300...38400	9600...115200	1200...115200 / 9600...115200
Data speed of radio interface bps	9600	19200	19200	19200/9600**)	28800/9600**)	28800/115200
**) Depends on channel spacing and modulation    ***) Separate operating voltage feeding through 4-pin ODU MINI-snap size1 connector						
<b>GENERAL</b>						
Operating voltage Vdc	+8...+30	+6...+30	+9...+16	+9...+16	+12...+30	+6...+30
Power consumption: RX	<0.9 W	<1.2 W	<1.2 W	<1.2 W	<1.32 W	<1.0 W
TX	<3 W	<3.8 W	<3.8 W	<7.0 W	<5.8 W	<4...7 W
When DTR is "0"	0.006 W	0.01 W	0.01 W	0.01 W	0.46 W	0.01 W
Antenna connector 50 Ω	SMA, female	TNC, female	TNC, female	TNC, female	TNC, female	TNC, female
Weight	125 g	250 g	850 g battery 520 g w/o battery	850 g battery 520 g w/o battery	420 g	<500 g
Size H x W x D mm	57 x 125 x 16	137 x 67 x 29	187 x 84 x 50	187 x 84 x 50	165 x 55 x 55	176 x 95 x 42
Standards:						
EN 300 113 (radio)	-	-	-	•	•	•
EN 300 220 (radio)	•	•	•	-	-	-
EN 301 489 (EMC)	•	•	•	•	•	•
EN 60950 (safety)	•	•	•	•	•	•
FCC CFR47 Part 90	-	-	-	•	•	•
Typical line of sight communication distance	<10 km	<10 km	<10 km	20 km	20 km	20 km
Compatibility with other SATEL modems	1870	Compact-Proof (869), modules *****)	EASy 869, modules *****)	EASy family, modules *****)	EASy family, modules *****)	EASy family, modules *****)
Compatibility with other manufacturers' radio protocols	-	-	-	•	•	•
*****) Check from SATEL different module types						
Values are subject to change without notice.						

# SATEL

Mission-Critical Connectivity

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	SATELLINE-3AS VHF	SATELLINE-4Pro	SATELLINE-EASy Pro	SATELLINE-EASy	SATEL EASy-Proof
<b>TRANSCEIVER</b>					
Frequency MHz	135...174 / 218...238	406.18...470	403...473	330...420 / 403...473	330...420 / 403...473
Tuning range MHz	135...155, 138...160, 155...174, 218...238	63.8 MHz	70 MHz	90 / 70 MHz	90 / 70 MHz
Channel spacing kHz	25, 20*), 12.5	25, 12.5 Selectable	25, 20*), 12.5, 6.25*) Selectable	25, 20*), 12.5, 6.25*) Selectable	25, 20*), 12.5, 6.25*) Selectable
*) Uses 12.5 kHz channel width					
<b>TRANSMITTER</b>					
Carrier power / 50 Ω	0.1...5 W	2...35 W	10...35 / 5...25 W	0.1...1 W	0.1...1 W
<b>RECEIVER</b>					
Sensitivity (BER<10E-3)	<-115 dBm	<-117 dBm	<-114 dBm	<-114 dBm	<-114 dBm
<b>DATA MODEM</b>					
Interface level	RS-232 RS-422 RS-485	RS-232	RS-232	RS-232 LVTTTL, TTL RS-422	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 Connector	D15, female	8-pin ODU ***)	8-pin ODU ***)	D15, female	Deutsch DT04-6P-CL09
Data speed of RS interface bps	1200...38400	9600...115200	300...38400	300...38400	300...38400
Data speed of radio interface bps	19200/9600 **)	28800/14400 **)	19200/9600 **)	19200/9600 **)	19200/9600 **)
**) Depends on channel spacing and modulation      ***) Separate operating voltage feeding through 4-pin ODU MINI-snap size1 connector					
<b>GENERAL</b>					
Operating voltage Vdc	+9...+30	+9...+16	+9...+16	+3...+9 / +6...+30	+6...+30
Power consumption: RX	<1.7 W	<1.8 W	<1.8 W	<1.2 W	<1.2 W
TX	<6.6 W @ 1W <22 W @ 5W	<120 W	<110 W	<7.0 W	<3 W
When DTR is "0"	0.07 W	0.4 W	0.4 W	0.01 W	0.01 W
Antenna connector 50 Ω	TNC, female	TNC, female	TNC, female	TNC, female	TNC, female
Weight	265 g	1420 g	1420 g	250 g	460 g
with heat sink	550 g	-	-	-	-
Size H x W x D mm	137 x 67 x 29	-	-	137 x 67 x 29	176 x 95 x 42
with heat sink mm	137 x 80 x 56	189 x 138 x 71	189 x 138 x 71	-	-
Standards:					
EN 300 113 (radio)	•	-	•	•	•
EN 300 220 (radio)	-	-	-	-	-
EN 301 489 (EMC)	•	-	•	•	•
EN 60950 (safety)	•	-	•	•	•
FCC CFR47 Part 90	•	•	•	•	•
Typical line of sight communication distance	30 km	>30 km	>30 km	20 km	20 km
Compatibility with other SATEL modems	-	EASy family, modules *****)	EASy family, modules *****)	EASy family, modules *****)	EASy family, modules *****)
Compatibility with other manufacturers' radio protocols	-	•	•	•	•

\*\*\*\*\*) Check from SATEL different module types

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