

SATELLINE Radio Modem Comparison

	SATELLINE-1870E	SATELLINE-EASy 869	SATEL Compact-Proof (869)	SATEL Compact-Proof	SATELLINE-3AS Epic DB	SATELLINE-3AS NMS	SATELLINE-3AS Epic NMS
TRANSCEIVER							
Frequency MHz	869.4125 ... 869.6375	869.4125 ... 869.6375	869.4125 ... 869.6375	330...420 / 403...473	330...470	330...470	330...470
Tuning Range	10 channels	10 channels	10 channels	90 / 70 MHz	+/-2 MHz from central freq. OR 2 x 2 MHz separate bands	+/-2 MHz from central freq.	+/-2 MHz from central freq. OR 2 x 2 MHz separate bands
Channel Spacing kHz	25	25	25	25, 20, 12.5*)	25, 20, 12.5	25, 20, 12.5	25, 20, 12.5
*) Selectable							
TRANSMITTER							
Carrier Power / 50 Ω	5...500 mW	10...500 mW	10...500 mW	0.1...1 W	1...10 W	0.01...1 W	1...10 W
RECEIVER							
Sensitivity (BER<10E-3)	<-108 dBm	<-111 dBm	<-111 dBm	<-114 dBm	<-115 dBm	<-115 dBm	<-115 dBm
DATA MODEM							
Interface Level	RS-232	RS-232 LVTTTL, TTL RS-422	RS-232	RS-232	RS-232 RS-422 RS-485	RS-232 RS-422 RS-485	RS-232 RS-422 RS-485
Interface	One port for data	One port for data	One port for data	One port for data	One port for data	Two ports: data and NMS	Two ports: data and NMS
Interface Connector	DIN41651-16-pin male	D15, female	8-pin ODU	8-pin ODU	D15, female	D15, female	D15, female
Data Speed of RS Interface bps	300...19200	300...38400	300...38400	300...38400	300...38400	1200...38400	1200...38400
Data Speed of Radio Interface bps	9600	19200	19200	19200/9600**)	19200/9600**)	19200/9600**)	19200/9600**)
) Depends on channel spacing 25 kHz / 12.5 and 20 kHz *) Separate operating voltage feeding through 4-pin ODU MINI-snap size1 connector							
GENERAL							
Operating Voltage Vdc	+8...+30	+6...+30	+9...+16***)	+9...+16***)	+11.8...+30	+9...+30	+11.8...+30
Power Consumption: RX	<0.9 W	<1.2 W	<1.2 W	<1.2 W	<1.6 W	<1.4 W	<1.6 W
TX	<3 W	<3.8 W	<3.8 W	<7.0 W	<32 W	<6.0 W	<36 W
When DTR is "0"	0.006 W	0.01 W	0.01 W	0.01 W	0.1 W	0.05 W	0.1 W
Antenna Connector 50 Ω	SMA, female	TNC, 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	580 g	260 g	580 g
with Heat Sink	-	-	-	-	1480 g	-	1480 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	154 x 123 x 29	137 x 67 x 29	154 x 123 x 29
with heat Sink	-	-	-	-	154 x 151 x 77	-	154 x 151 x 77
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	30 km	20 km	30 km
Compatibility with Other SATELLINE Modems	1870	3AS 869, Compact-Proof (869), modules ****)	EASy 869, 3AS 869, modules ****)	3AS, Epic, EASy family, modules ****)	3AS, EASy family, modules ****)	3AS Epic NMS	3AS NMS
Compatibility with Other Manufacturers' Protocols	-	-	-	•	•	-	-

****) Check from Satel different module types

Values are subject to change without notice.

SATELLINE Radio Modem Comparison

	SATELLINE-3AS VHF	SATELLINE-3ASd Epic Pro DB	SATELLINE-EASy Pro	SATELLINE-EASy	SATEL EASy-Proof
TRANSCEIVER					
Frequency MHz	135...174 / 218...238	330...412.5	403...473	330...420 / 403...473	330...420 / 403...473
Tuning Range MHz	135...155, 138...160, 155...174, 218...238	+/-2 MHz from central freq OR 2 x 2 MHz separate bands	70 MHz	90 / 70 MHz	90 / 70 MHz
Channel Spacing kHz	25, 12.5	25, 20, 12.5	25, 20, 12.5 *)	25, 20, 12.5 *)	25, 20, 12.5 *)
*) Selectable					
TRANSMITTER					
Carrier Power / 50 Ω	0.1...5 W	1...10 W	10...35 / 5...25 W	0.1...1 W	0.1...1 W
RECEIVER					
Sensitivity (BER < 10E-3)	<-115 dBm	<-115 dBm	<-114 dBm	<-114 dBm	<-114 dBm
DATA MODEM					
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	8-pin ODU
Data Speed of RS Interface bps	1200...38400	300...38400	300...38400	300...38400	300...38400
Data Speed of Radio Interface bps	19200/9600 **)	19200/9600 **)	19200/9600 **)	19200/9600**)	19200/9600 **)
) Depends on channel spacing *) Separate operating voltage feeding through 4-pin ODU MINI-snap size1 connector					
GENERAL					
Operating Voltage Vdc	+9...+30	+11.8...+30	+9...+16	+3...+9 / +6...+30	+6...+30***)
Power Consumption: RX	<1.7 W	<1.6 W	<1.8 W	<1.2 W	<1.2 W
TX	<6.6 W @ 1W <22 W @ 5W	<32 W	<110 W	<7.0 W	<3 W
When DTR is "0"	0.07 W	0.1 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	1300 g	1640 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	165 x 138 x 57	165 x 138 x 73	-	-
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 SATELLINE modems	-	3AS, Epic, EASy family, modules ****)	3AS, Epic, EASy family, modules ****)	3AS, Epic, EASy family, modules ****)	3AS, Epic, EASy family, modules ****)
Compatibility with Other Manufacturers' Protocols	-	•	•	•	•
****) Check from Satel different module types					
Values are subject to change without notice.					