

Supreme reliability and security

The heart of SATEL XPRS

**IP RADIO
ROUTER**

SATELxprs

Mission-Critical Connectivity



IP RADIO ROUTER

SATEL XPRS IP radio router, the heart of the SATEL XPRS communications solution, is an excellent choice for data transfer in mission-critical applications requiring long range, security and stability of the private radio network. It provides high available connectivity, with reliable radio technology and switchover functionality. Redundant routing with other, adjacent, technologies is also provided. In addition to IP communications, support for serial components is ensured by serial modes of operation as well as protocol conversions. With its advanced coding technologies, excellent sensitivity and performance values, the SATEL XPRS IP radio router is the market leader in the spectral efficiency.



MISSION-CRITICAL CONNECTIVITY REQUIREMENTS

- High available, long range connectivity
- Easy and error free deployment
- Integrated serial and IP networking support and conversions
- Protect the legacy investments
- Combine with adjacent technologies:
- Automated switch overs with redundant routing protocols
- Avoid costs of endangered cyber security



EASY CONFIGURATION

- NETCO centralized configuration software
- Web browser based user interface
- SNMP for remote management
- SATEL NMS for serial networking
- Over-the-air remote management and firmware updating
- Firmware and configuration uploads via USB
- Error free configuration and automated parameter calculation
- Up to 80% savings by reduced deployment time
- Avoid human configuration errors



CYBER SECURITY

- Models with AES-128 / -256 encryption support
- Built-in firewall
- User authentication
- SATEL cyber security auditing procedure
- Data and management network separation
- Secure browser access

Long range	VLAN	Unicast Broadcast	Bridge mode	NETCO	Redundant routing	SNMP monitoring	Radio data up to 230 kbps	
Protocol conversions	IEC-104/101, DNP3, Modbus TCP/RTU		Firewall	0.1-5 W TX-power	Interoperability	Serial over IP	Cyber security	UHF / VHF

SATELLAR XT 5R



SATELLAR XT 5RC



SATELLAR XT 5RC
w. DISPLAY



Name	XT 5R (FSK)		XT 5RC (FSK)		XT 5R (QAM)		XT 5RC (QAM)	
Model / Type identification	SATELLAR RU / TA-26		SATELLAR RU / TA-26		SATELLAR RU-Q / TA-26		SATELLAR RU-Q / TA-26	
SATEL order code: -with encryption support -w/o encryption support -with LCD + encr.support -with LCD, w/o encr.support	YF0100		YF0110 YF0120		YF0200 UHF / YF0500 VHF YF0205 UHF / YF0505 VHF		YF0210 UHF / YF0510 VHF YF0215 UHF / YF0515 VHF YF0220 UHF / YF0520 VHF YF0225 UHF / YF0525 VHF	
Frequency MHz	360-405 / 400-445 / 440-485				135-175 / 360-405 / 400-445			
Tuning range	40 / 45 MHz							
Modulations	4, 8, 16 FSK				2, 4, 8, 16, 32, 64 QAM (2QAM only for UHF frequencies)			
Channel width	12.5 / 25 / 150 kHz				12.5 / 25 kHz			
Data speed radio (max.)	19.2 kbps @ 12.5 kHz 38.4 kbps @ 25 kHz (16FSK) 230 kbps @150 kHz (16FSK)				60.5 kbps @ 12.5 kHz (64QAM) 121 kbps @ 25 kHz (64QAM) Max.coded			
RX sensitivity (BER 10E-6)	Air speed	Channel width	Modulation	Sensitivity (10E-6)	Air speed	Channel width	Modulation	Sensitivity (10E-6) UHF / VHF
	230.4 kbps	150 kHz	16FSK	-82 dBm	121 kbps	25 kHz	64QAM	-98 / -98 dBm
	38.4 kbps	25 kHz	16FSK	-94 dBm	60.5 kbps	12.5 kHz	64QAM	-100 / -99 dBm
	19.2 kbps	12.5 kHz	16FSK	-97 dBm	80.6 kbps	25 kHz	16QAM	-105 / -104 dBm
	115.2 kbps	150 kHz	4FSK	-97 dBm	40.3 kbps	12.5 kHz	16QAM	-106 / -106 dBm
	19.2 kbps	25 kHz	4FSK	-108 dBm	40.3 kbps	25 kHz	4QAM	-111 / -110 dBm
	9.6 kbps	12.5 kHz	4FSK	-114 dBm	20.2 kbps	12.5 kHz	4QAM	-113 / -113 dBm
TX power (nominal)	37 dBm (5 W)				37 dBm (5 W) mean: average 30 dBm (1 W), max 32 dBm (1.5 W) PEP: average 37 dBm (5 W), max 38 dBm (6.6 W)			
Interface	RS-232, -422 / -485		RS-232, -422 / -485, USB, Ethernet		RS-232, -422 / -485		RS-232, -422 / -485, USB, Ethernet	
Operating voltage	+ 10.6 Vdc ... +30 Vdc							
Temperature ranges	-25 ...+55 °C complies with the radio standards -30 ...+70 °C functional -40 ... +85 °C storage							
Mounting	DIN rail (side or back) Direct on flat surface							
Standards compliance*)								
Radio			EN 300 113 EN 302 561		EN 300 113			
EMC	IEC 6100-6-2 IEC 6100-6-4		EN 301 489-1, -5		EN 301 489-1, -5			
Safety	EN 60950-1							
Power consumption without display TX / RX with display TX / RX	22.8 / 2.8 W		24.4 / 4.2 W 24.8 / 4.8 W		UHF 14.4 / 3.8 W	VHF 16 / 4.4 W	UHF 15.8 / 5.2 W 16.4 / 5.8 W	VHF 17.4 / 5.8 W 18 / 6.4 W

PRBS (Pseudorandom Binary Sequence), measured with 30 V add 2.5 W for connected USB devices

*) Contact SATEL for more information

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.

Contact us

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