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 encyption support

Built-in firewall

User authentication

SATEL cyber security auditing procedur

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	Interoper-ability	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 kbs @ 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

You can contact us directly or get in touch with your local distributor.

SATEL, Meriniitynkatu 17 P.O.Box 142,
FI-24101 Salo, FINLAND
Tel. +358 2 777 7800
info@satel.com

03/2020

Visit: www.satel.com

SATEL