Supreme reliability and security

SATELxprs

Mission-Critical Connectivity

IP RADIO ROUTER

SATELLAR 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, SATELLAR, 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 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

Data encryption according to AES-128 / AES-256 standards

Built-in firewall

User authentication

SATEL cyber security auditing procedur

Data and management network separation

Secure browser access

Long range	VLAN	SATEL NMS	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	Interop-erability	Serial over IP	Cyber security	UHF

SATELLAR XT 5R
SATELLAR XT 5RC
SATELLAR XT 5RC w. DISPLAY

*) Ask the availability

	XT 5R (FSK)	XT 5RC (FSK)	XT 5R (QAM)	XT 5RC (QAM)
SATEL order code with display	YF0100	YF0110 YF0120	YF0200	YF0210 YF0220
Frequency MHz	320-365		320-365*	
	360-405		360-405*	
	400-445		400-445	
	440-485		440-485*	
	480-520		480-520*	
Tuning range	45 MHz			
Channel width (programmable)	12.5 kHz / 25 kHz / 150 kHz		6.25 kHz / 12.5 kHz / 25 kHz	
Data speed radio (max.)	19.2 kbps @ 12.5 kHz 38.4 kbs @ 25 kHz (16FSK) 230 kbps @150 kHz (16FSK)		28.1 kbps @6.25 kHz (64QAM) 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)
	230.4 kbps	150 kHz	16FSK	-82 dBm	121 kbps	25 kHz	64QAM	-98 dBm
	38.4 kbps	25 kHz	16FSK	-94 dBm	60.5 kbps	12.5 kHz	64QAM	-100 dBm
	19.2 kbps	12.5 kHz	16FSK	-97 dBm	28.1 kbps	6.25 kHz	64QAM	-102 dBm
	115.2 kbps	150 kHz	4FSK	-97 dBm	20.2 kbps	25 kHz	2QAM	-114 dBm
	19.2 kbps	25 kHz	4FSK	-108 dBm	10.1 kbps	12.5 kHz	2QAM	-116 dBm
	9.6 kbps	12.5 kHz	4FSK	-114 dBm	4.7 kbps	6.25 kHz	2QAM	-118 dBm

	XT 5R (FSK)	XT 5RC (FSK)	XT 5R (QAM)	XT 5RC (QAM)
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		+ 10.6 Vdc ... +30 Vdc	
Temperature ranges	-25 ...+55 °C complies with the radio standards -30 ...+75 °C functional -40 ... +85 °C storage			
Mounting	DIN rail (side or back) Direct on flat surface			
Standards compliance				
Radio		EN 300 113-1, -2 EN 302 561	EN 300 113-1, -2 EN 301 166-1, -2	
EMC	IEC 6100-6-2 IEC 6100-6-4	EN 301 489-1, -5	EN 301 489-1, -5	
Safety		EN 60950-1	EN 60950-1	
Power consumption without display TX / RX with display TX / RX	17.9 W / 2.8 W	19.3 W / 4.2 W 19.9 W / 4.8 W	14.4 W / 3.8 W	15.8 W / 5.2 W 16.4 W / 5.8 W

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

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 | Fax +358 2 777 7810
info@satel.com

Visit: www.satel.com

SATEL