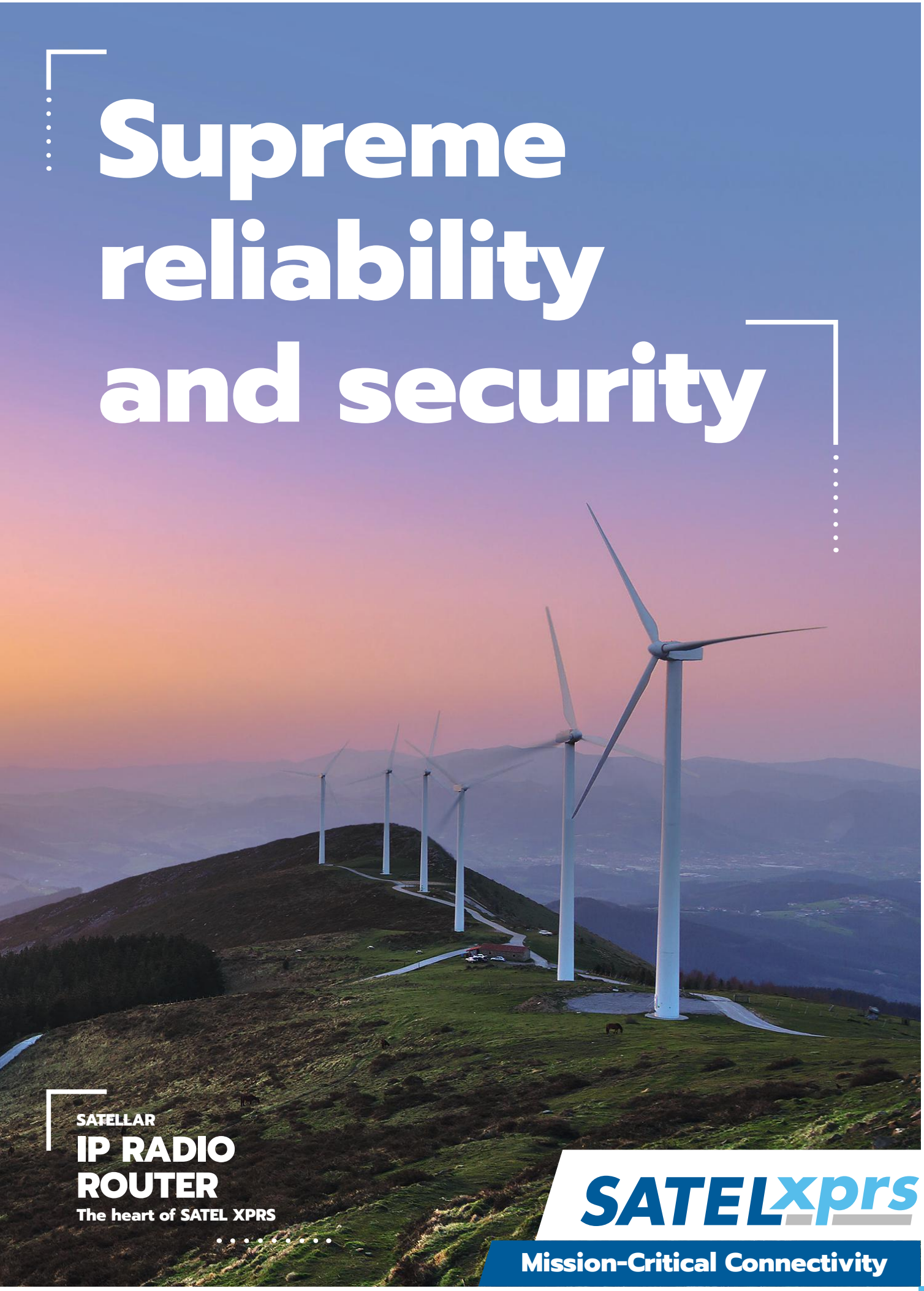
Supreme reliability and security



SATELLAR

IP RADIO ROUTER

The heart of SATEL XPRS

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 | Interoperability | Serial over IP | Cyber security | UHF

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 display	YF0100		YF0110 YF0120		YF0200		YF0210 YF0220	
Frequency MHz	360-405				360-405			
	400-445				400-445			
	440-485							
Modulations	4, 8, 16 FSK				2, 4, 8, 16, 32, 64 QAM			
Tuning range	45 MHz							
Channel width	12.5 kHz / 25 kHz / 150 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
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	

*) Ask the availability

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.

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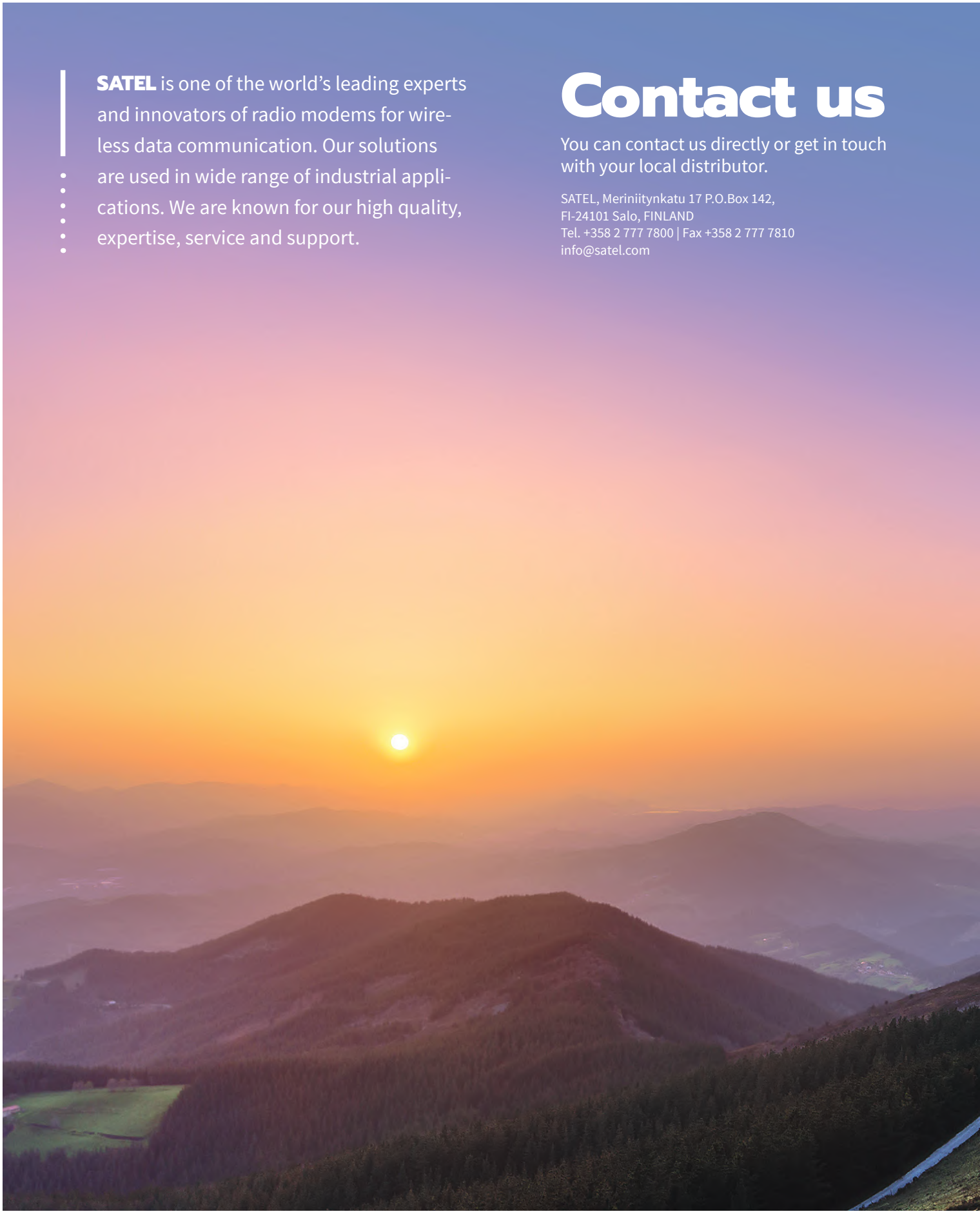

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