



Point-to-point microwave links distance-engineered for demanding applications

Aprisa XE

Reliable Carrier-class availability Cost-effective Flexible interfaces

## Wireless monitoring, control and communications for utility companies

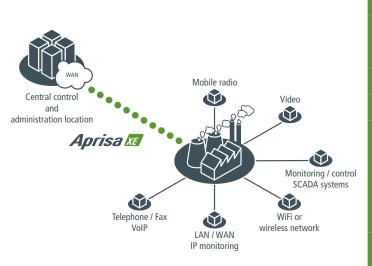
With electric, gas and water companies needing mission-critical data and voice transmission between control centres and utility assets, the network cannot compromise on safety or efficiency. Reliable communications infrastructure is essential for a range of applications including remote monitoring and control, video surveillance and basic email and broadband Internet access. The Aprisa XE family of point-to-point radio links from 4RF provides the perfect replacement for outdated analogue systems, excelling in today's IP-based applications while also supporting all data and voice requirements.





## ADVANCED POINT-TO-POINT WIRELESS SOLUTIONS

The Aprisa XE supports a flexible range of interfaces for carrier-class, mission-critical connectivity between control centres and utility plant and infrastructure. The Aprisa XE can establish links over difficult terrain and long distances, often greatly exceeding 100 km (60 miles). The Aprisa XE is easy to deploy and integrate with existing infrastructure, providing complete support for voice, data and IP traffic, including SCADA, teleprotection, telephone, mobile radio, LAN, VoIP and video, including V.24. Its reliability, high capacity and low total cost of ownership means that the Aprisa XE outperforms satellite links, fixed infrastructure and high frequency microwave links.



SPECIFICATION	APRISA XE
Frequency bands	300 MHz – 2700 MHz (licensed bands)
Modulation	Software configurable from QPSK to 128 QAM
Capacity	72 kbit/s – 65 Mbit/s
Channel sizes	From 25 kHz to 14 MHz (band-dependent)
Interfaces (supported by digital cross connect)	E1/T1 framed and unframed 2-Wire FXO/FXS 4-Wire E&M V.24 asynchronous, synchronous, over sampling Synchronous X.21/V.35/RS-449/RS-530 10/100Base-T Ethernet
Management	Element: Embedded web-based SuperVisor software Network: Any SNMP-compliant NMS platform

## Why the Aprisa XE?

- Reliable with industry-leading reliability, even over long distances, challenging terrain or adverse weather conditions, the Aprisa XE provides an efficient communications solution for relaying critical information throughout utility networks.
- Carrier-class availability providing always-on, 99.999% availability, high capacity and significant latency improvements over satellite, the Aprisa XE provides the quality of service required for mission-critical demanding applications such as realtime monitoring and control of remote sites.
- Cost-effective financially out-performing satellite and high frequency microwave communications, the Aprisa XE enables utility companies to optimise capital expenditure and virtually eliminate operational expenditure.
- Flexible interfaces with support for all types of traffic, the Aprisa XE efficiently aggregates and transports a mix of voice, data and IP traffic, easily integrating any legacy requirements with its modularly constructed multiplexer supporting easy selection of the required interfaces.

## **ABOUT 4RF**

Operating in more than 130 countries, 4RF provides radio communications equipment for critical infrastructure applications. Customers include utilities, oil and gas companies, transport companies, telecommunications operators, international aid organisations, public safety, military and security organisations. 4RF point-to-point and point-to-multipoint products are optimized for performance in harsh climates and difficult terrain, supporting IP, legacy analogue, serial data and PDH applications. Copyright © 2012 4RF Limited. All rights reserved. This document is protected by copyright belonging to 4RF Limited and may not be reproduced or republished in whole or part in any form without the prior written consent of 4RF Limited. While every precaution has been taken in the preparation of this literature, 4RF Limited assumes no liability for errors or omissions, or from any damages resulting from the use of this information. The contents and product specifications within it are subject to revision due to ongoing product improvements and may change without notice. Aprisa and the 4RF logo are trademarks of 4RF Limited. Version 1.3.0



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