

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

Aprisa XE

Long range Carrier-class availability High capacity Flexible interfaces

## Rural network expansion for fixed line telecommunications operators

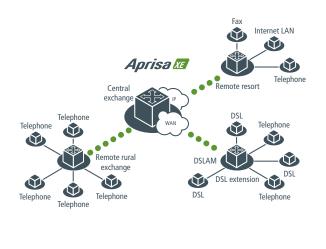
Telecommunications operators need a cost-effective communications platform to make a realistic, sustainable business case for rural and remote connectivity. Whether for basic telephony services, DSL or high speed IP broadband, the long distances involved make many options commercially or technically unfeasible. The Aprisa XE family of point-to-point radios from 4RF provides operators with a flexible, carrier-class solution for seamless network extension, supporting connectivity over distances of up to 250 km. It cost-effectively bypasses existing infrastructure or replaces expensive satellite links, rapidly expanding network coverage and customer numbers.





## ADVANCED POINT-TO-POINT WIRELESS SOLUTIONS

An Aprisa XE point-to-point microwave link supports a flexible range of legacy and IP interfaces, easily managed via SNMP. Its modular multi-service multiplexer enables easy selection of the required combination of basic PSTN telephony, DSL extension and high-speed Internet access. The Aprisa XE is ideal for providing services to remote businesses, low density and suburban environments, including over difficult terrains and challenging environmental conditions. With the Aprisa XE's low total cost of ownership, teleco operators can make a sustainable business case for rural and remote connectivity.



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 synchronous, asynchronous, over sampling High-speed 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?

- Long range with support for links of up to 250 km (155 miles) and the ability to maintain connections even over difficult terrain and in adverse weather conditions, the Aprisa XE is perfect for making rural and remote connectivity not only feasible, but also profitable. Always-on network coverage can be rapidly extended from the central exchange or WAN access point.
- Carrier-class availability the Aprisa XE provides 99.999% availability, enabling operators to extend QoS guarantees to even the most remote customers, minimising network downtime and maximising customer satisfaction. The use of licensed frequencies means that operation is interference-free.
- High capacity with up to 65 Mbit/s capacity, and class-leading spectral efficiency, a single Aprisa XE link enables a complete rural community to be provided with broadband services. The Aprisa XE's high capacity means that it is also ideal for backhauling traffic from cellular or WiMAX / FWA base stations.
- Flexible interfaces the Aprisa XE provides support for all types of legacy and IP traffic, making it suitable throughout the rural network whether for inter-exchange linking for basic PSTN services, DSL extension via a locally situated DSLAM, or direct broadband connectivity to a rural location.

## **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



TELEPHONE +64 4 499 6000 FACSIMILE +64 4 473 4447 EMAIL sales@4rf.com URL www.4rf.com