

Aprisa SE and the Customer Interface Card (CIC) plug-in module are designed to enable network operators to configure a wireless link with the interface option best suited to their specific application.

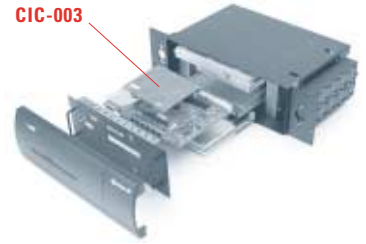
CIC-003 is designed for telecommunications, digital mobile radio and cellular networks to interconnect with the operator's core network infrastructure and deliver services to rural or remote sites. By connecting external multiplexers to the E1 interface, various analog and digital circuits can be transmitted over the link to remote customers. The E1 circuit can also provide interconnection between the digital mobile radio or cellular switch and a remote base station without the need to lease circuits from a fixed network provider.

The Ethernet interface can be used to deliver high-speed Internet services to rural subscribers, or used to provide an IP backhaul circuit for remote management and monitoring of IP-based cellular or telecommunications infrastructure.

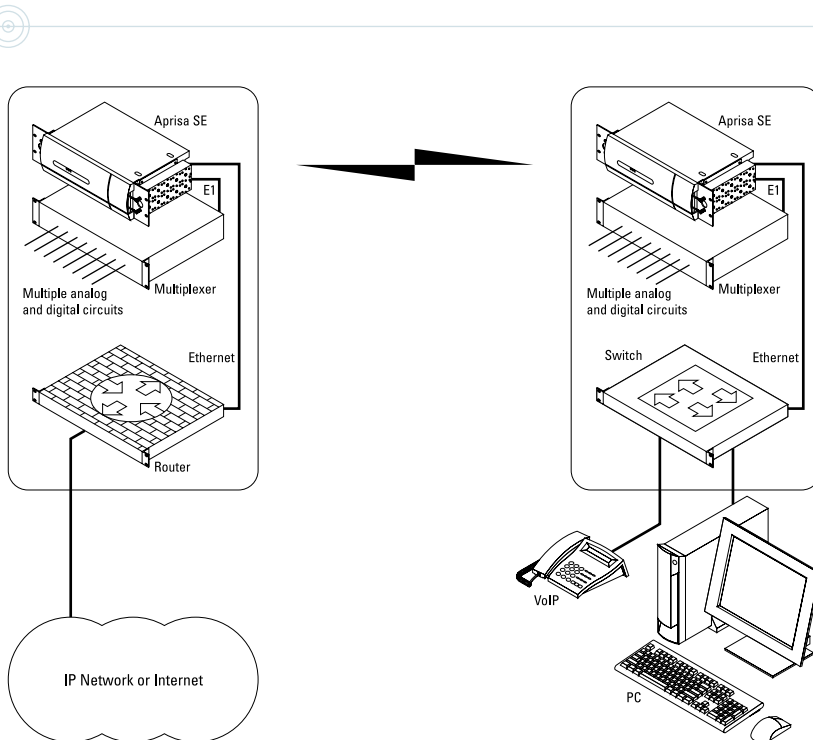
**PRODUCT OVERVIEW**

CIC-003 provides one E1 interface which supports both framed and unframed connections and one Ethernet interface. The E1 interface is compliant to the G.703 and G.704 specifications. It provides up to 18 time slots or 1200 kbps of data, and can pass data across the link transparently. Timeslots 1 to 31 within the E1 data stream can be selected and cross-connected via software for transmission over the radio link to the remote end. Each timeslot is automatically assigned 64 kbps of bandwidth, and the timeslots do not have to be set consecutively. Timeslot 0 is used for synchronization and cannot be selected. A visible alarm for LOS is provided on the RJ-45 connector.

The IEEE 802.3 compatible 10Base-T interface acts as a LAN/WAN Ethernet learning bridge allowing users to connect two sections of a LAN/WAN together over the radio link. Bandwidth can be allocated to the Ethernet interface in 8 kbps steps up to the maximum available on the link. Filtering and forwarding traffic from its 10,000 MAC address LAN table ensures that only packets destined for devices at the remote end will be passed across the link thereby conserving radio bandwidth. It can be operated in half or full duplex transparent mode with filtering and Tinygram compression enabled.



- 1 x G.703/4 COMPLIANT FRACTIONAL E1 INTERFACE
- 1 x IEEE 802.3 10BASE-T ETHERNET BRIDGE PORT
- CONFIGURED USING WINDOWS® BASED APRISA SETUP™ SOFTWARE
- COMPLIANT WITH INTERNATIONALLY RECOGNIZED STANDARDS



**APRISA SE DIGITAL ACCESS RADIO**

Aprisa SE is the simple, cost-effective solution to a wide range of low capacity point-to-point digital radio applications.

Compact and simple to install at any site, Aprisa SE is also easy to use, reducing user expertise requirements, and minimizing the need for additional equipment.

Aprisa SE incorporates a single customer interface card (CIC), with a specific mix of interfaces optimized for the application needs, such as simple fractional E1 and Ethernet, or a complex combination of analog voice and digital data circuits.

# CIC-003 SPECIFICATIONS

# ABOUT 4RF

## PORT 1: E1

General	Standard Interface Cabling Maximum line length Bandwidth allocation Line Code Stability Jitter performance	ITU-T G.703/G.704 120 $\Omega$ balanced RJ-45 Crossover and straight through 1.7 km (typical, with 36 dB of loss in standard cat5 cable) 64 kbps time slots HDB3 $\pm 50$ ppm ITU-T G.823 (sections 2 & 3)
Diagnostics	Software  Hardware interface port	Local and remote alarm logging Local and remote software set loopbacks Green LED: Link OK Yellow LED: Loss of signal

## PORT 4: 10Base-T

General	Standard Interface Cabling Maximum line length Bandwidth allocation Data buffer size Address table size Protocol	IEEE 802.3 UTP (10Base-T) Crossover and straight through 100 m (on standard CAT 5 Ethernet cabling) N x 8 kbps up to max available 256 frames 10,000 IP addresses HDLC
Configuration options	Ethernet mode Tinygram compression	Half duplex & transparent (default) or full duplex & filtered Enabled (default) or disabled
Diagnostics	Software Hardware interface port	Local and remote alarm logging Green LED: Link OK Yellow LED: Link data traffic

### SOLUTION LEADERSHIP

To ensure 4RF systems remain at the forefront of point-to-point wireless solutions, we're committed to substantial ongoing investment in engineering expertise and R&D.

### QUALITY ASSURANCE

To ensure our products' performance is second to none, we invest in high-quality manufacturing and testing resources, leveraging New Zealand's engineering expertise and low cost-base.

### COMPREHENSIVE SUPPORT

To assure your success, our internationally recognized engineering and technical expertise is available to support you via consultancy, business case advice, network design and path planning. Our worldwide distributor and support infrastructure provides prompt communication, technical support and training.

### BUSINESS INTEGRITY

New Zealand, our home base, has a safe political and financial environment from where we manage our company based on international best practice.

### JUST CALL US

We invite you to tell us about your network and what you would like to achieve. We'd be pleased to visit and present our credentials, table our reference sites and testimonials, help you prepare a network design plan, and demonstrate our solutions.



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