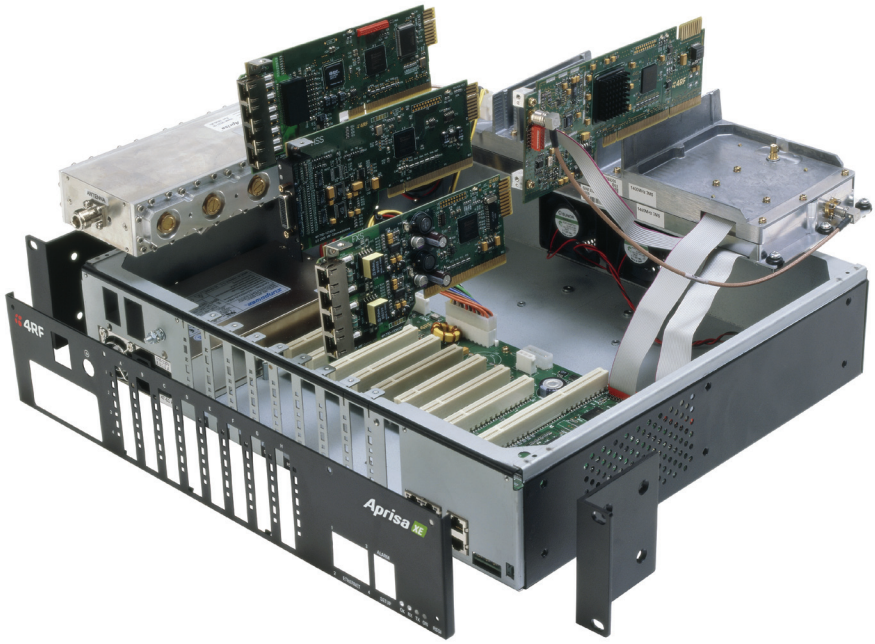
Aprisa XE

POINT-TO-POINT DIGITAL MICROWAVE LINKS

Interface cards



Aprisa XE: maximizing spectrum use and making challenging long distance links possible

Efficient future-proof single-box architecture: the Aprisa XE's built-in multiplexer and cross-connect eliminate external equipment and minimize the over-the-air requirements, with eight customer-configurable interface slots integrating voice and data traffic. The following Aprisa XE interface cards are available:

- NEW **QETH** Quad port Ethernet interface card supporting 10Base-T or 100Base-TX.
- **QJET** Quad E1/T1 interface card providing four E1 / T1 framed or unframed channels.
- **QV24** Quad V.24 serial interface card providing four V.24 / RS-232 serial data channels.
- **HSS** High-Speed Synchronous interface card providing a single high speed serial data channel.
- **Q4EM** Quad 4 wire E&M interface card providing four 4 wire E&M voice channels.
- **DFXO** Dual 2 wire FXO interface card providing two foreign exchange office channels.
- **DFXS** Dual 2 wire FXS interface card providing two foreign exchange subscriber channels.

The Aprisa XE in brief

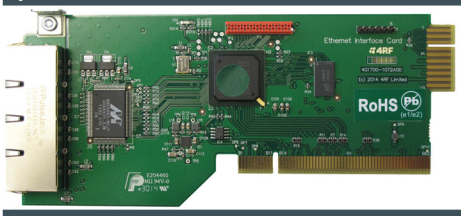
- Long range
- High capacity
- Carrier-class performance
- Flexible interfaces
- Cost-effective
- Reliable
- Easy installation and maintenance
- Rugged and robust
- Interference-free

Future-proof single-box architecture

QETH

Quad port Ethernet interface card supporting 10Base-T or 100Base-TX

NEW

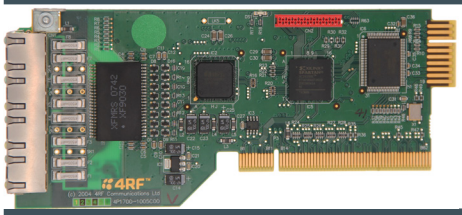


The QETH is a quad port Ethernet interface card supporting 10Base-T or 100Base-TX for transport of user Ethernet traffic. The QETH features are:

- Layer 2 Ethernet / VLAN Switch conforming to 802.1D/Q supporting standard LAN networks
- Traffic segregation with transparent VLAN and per port VLAN tagging for user and management traffic.
- QoS support for tight traffic control with per packet prioritization, scheduling and priority queuing. Priority can be either per port or per packet and scheduling can be either strict priority or weighted priority. Ingress rate limiting per port (up to 8 Mbit/s) can be used to protect against buffer flooding.

QJET

Quad E1 / T1 framed / unframed interface card



The QJET is a quad port 2 Mbit/s E1 / T1 digital interface providing unframed (G.703) and framed (G.704) interfaces.

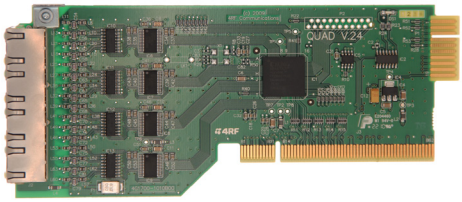
Unframed (G.703) E1 is typically used for transport of an entire E1 / T1 over the radio link.

Framed (G.704) E1 / T1 timeslots can be cross connected to:

1. Any other E1 / T1 timeslot on any other E1 / T1 interface providing transport, timeslot grooming and drop and insert functionality.
2. Analogue interface cards providing digital trunk interface connection to PBX and telephone exchanges.
3. QV24 interface cards providing synchronous over sampling circuits.

QV24

Quad V.24 serial interface card



The QV24 is a quad port serial interface card providing asynchronous and synchronous V.24 data transmission.

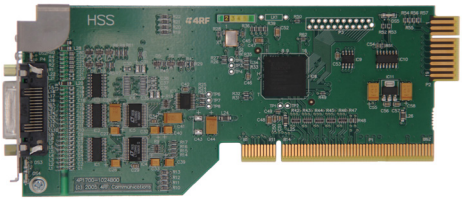
Asynchronous mode provides V.24 circuits at data rates of 300, 600, 1200, 2400, 4800, 7200, 9600, 12800, 14400, 19200, 23040, 28800, 38400, 57600 and 115200 bit/s.

In synchronous mode, interface data is synchronously mapped to radio capacity using proprietary subrate multiplexing providing data rates of 300, 600, 1200, 2400, 4800, 9600 and 19200 bit/s. QV24 interfaces are required at both ends of the circuit.

In over sampling mode, the interface data is sampled at a fixed 64 kHz. This timeslot can be cross connected to an E1 or T1. This over sampling mode can be operated up to 19200 bit/s.

HSS

Single synchronous serial interface card



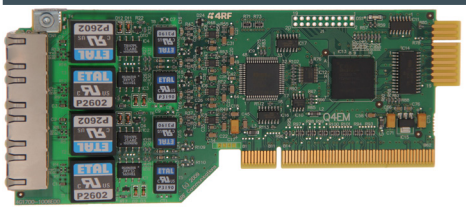
The HSS is a single port high speed serial interface card providing V.35, X.21, RS-449 and RS-530 synchronous data transmission as either a DTE or a DCE. It supports data rates of 8 to 2048 kbit/s in 8 kbit/s steps (dependent on rate selected). 8 kbit/s is used for control lines.

The interface card provides an LFH 60 connector and uses standard Cisco WAN port serial interface cables to provide the correct data interface connector.

The interface specification (X.21 / V.35 etc) is automatically changed by simply changing the type of interface cable connected to the HSS.

Q4EM

Quad 4 wire E&M interface card



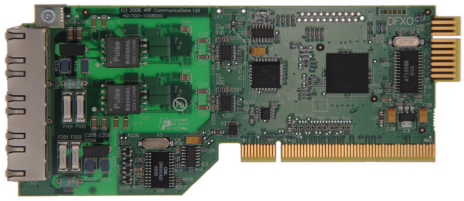
The Q4EM is a quad port analogue interface card providing a 4 wire analogue circuit and single E&M signalling.

The Q4EM digitizes analogue signals using either 64 kbit/s PCM (G.711-compliant) or 32, 24 or 16 kbit/s ADPCM compression (G.726-compliant), providing phone-quality voice transmission. Channel Associated Signalling (A bit) is used to signal between the interfaces.

The Q4EM E&M signalling leads are optically isolated, bi-directional lines which can be externally referenced to meet any of the EIA-464 connection types I, II,IV or V.

DFXO

Dual 2 wire loop signalling foreign exchange office (FXO) interface card



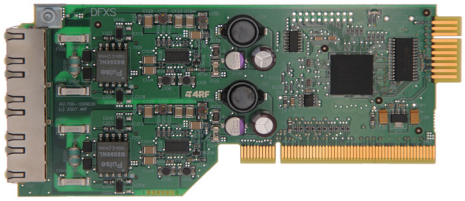
The function of FXO / FXS two wire loop interface circuits is to transparently extend the 2 wire interface from the exchange line card to the telephone / PBX, ideally without loss or distortion. These circuits are known as 'ring out, dial in' 2 wire loop interface circuits. The DFXO interface simulates the function of a telephone.

The DFXO digitizes analogue signals using either 64 kbit/s PCM (G.711-compliant) or 32, 24 or 16 kbit/s ADPCM compression (G.726-compliant), providing phone-quality voice transmission. Channel Associated Signalling (ABCD bits) is used to signal the remote DFXS.

Line and balance impedances are synthesized with high-performance DSP architecture.

DFXS

Dual 2 wire loop signalling foreign exchange subscriber (FXS) interface card



The function of FXO / FXS two wire loop interface circuits is to transparently extend the 2 wire interface from the exchange line card to the telephone / PBX, ideally without loss or distortion. These circuits are known as 'ring out, dial in' 2 wire loop interface circuits. The DFXS interface simulates the function of an exchange line card.

The DFXS digitizes analogue signals using either 64 kbit/s PCM (G.711-compliant) or 32, 24 or 16 kbit/s ADPCM compression (G.726-compliant), providing phone-quality voice transmission. Channel Associated Signalling (ABCD bits) is used to signal the remote DFXO.

Line and balance impedances are synthesized with high-performance DSP architecture.

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 analog, serial data and PDH applications.

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