

Broadband

## XLR 5000— E.F.M Multi-Service Access Platform



- **Case Communications XLR 5000 is a carrier class Multi- Service Access Platform that bridges the gap between legacy and the next generation networks.**
- **Support for both copper and fibre modules within the same card frame.**
- **Circuit Emulation Over IP to provide E1/T1 services to subscribers from a single platform.**

FACT SHEET

### Key Features

- Carrier Ethernet Access over Copper or Fibre
- EFMC up to 22.8Mbps (4 pairs) using EFM Bonding (PAF)
- EFMC up to 1Gbps
- CESoE (Circuit Emulation Service Over Ethernet) for E1/T1 Transport Over Ethernet
- IEEE 802.3ah Compliant
- Low Delay, Jitter and Packet Loss for delay sensitive applications
- EFM OAM Support
- QoS Features for guaranteed support of time critical applications such as IP telephony.

### Applications

- Metro Ethernet Extension (E-Line, E-LAN Services)
- Ethernet Demarcation Device (EDD) Applications
- Transparent LAN Service
- Fast Internet Access
- MDU / MTU backhaul
- Remote DSLAM backhaul
- Wireless (mobile/Wi-Fi) Backhaul
- Cost effective replacement for E1/T1

### Ethernet with support for Circuit Emulation for E1/T1 Over IP

The Case Communications XLR 5000 Multi-Service Access Platform is an Ethernet First Mile DSL card-frame which supports both traditional IP Access and conventional Time Division Multiplexed (E1/T1) access. This allows carriers to provide both high speed IP access and support for TDM services.

### Maximise ROI deploying services over copper and Fibre

The XLR 5000 supports both copper DSL and Fibre Modules, allowing a service operator to use a single platform for the two technologies and to cost effectively migrate from one service to the other.

### Support for OAM and P management.

The XLR 5000 supports the IEEE 802.3ah and standards based extended management features.

The XLR 5000 interoperates with both fast and Gigabit Ethernet interfaces from third party Ethernet switches, routers and SONET/SDH equipment.

In addition the XLR 5000 CPE units function as an Ethernet Demarcation Devices (EDD) allowing carriers to separate the boundary between the WAN and their customers LAN. The XLR monitors network status and operation at the customer's site, using a management interface which includes a comprehensive Command Line Interface (CLI), a user friendly GUI based Web Browser Interface, SNMP and Telnet.

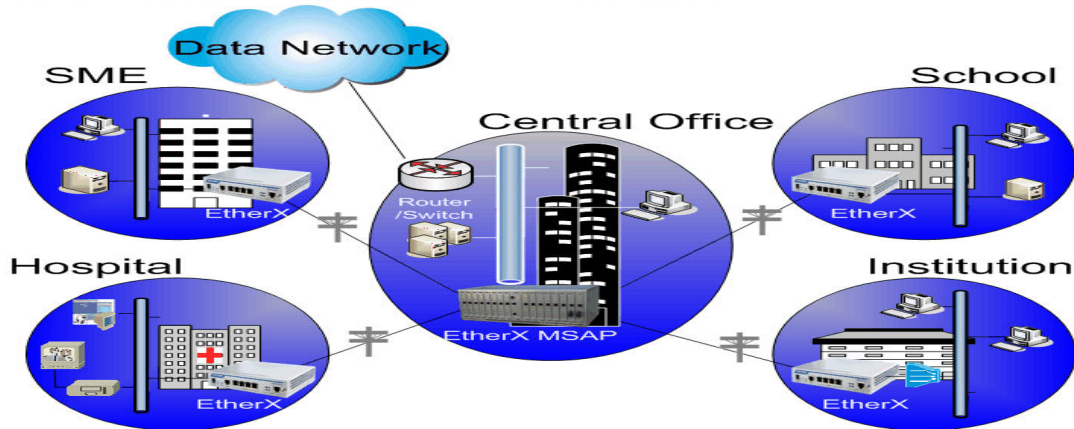
### Ethernet Traffic Management and QoS Features.

The XLR 5000 provides support for Ethernet Quality of Service (QoS), and Class of Service (CoS), standards using 802.1q VLAN and DSCP, stacked VLAN (Q-in-Q), four levels of priority, traffic flow and rate control. This traffic management and QoS features allow service providers to offer highly profitable and value added services

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## Mid-band Ethernet Service



### Mechanical

- Dimension (mm) : 483(W), 175(H), 245(D)
- 4 U height and 19" Rack Mountable,
- 6 robust and removable cooling fans

### Power Requirement

- Dual A + B redundant power feed
- Power Input: -36 ~ -76 Vdc
- Max Power Consumption: 150 Watts

### Environmental

- Operating Temperature: 0°~ +50°C
- Storage Temperature: -40°~ +85°C
- Relative Humidity: Up to 95%, non-condensing

### System

- Sixteen line module slots
- One control & switching module
- Two Gbps symmetric throughput per shelf

### Line Module (Subscriber Side)

- EFMC2/4: 2BASE-TL Module
  - Extended G.SHDSL, G.SHDSL.bis
  - EFM Bonding (IEEE802.3ah PAF)
  - Connector Type: 50 pin Telco (rear)
  - EFMC2: 11.4Mbps over 2 pairs
  - EFMC4: 22.8Mbps over 4 pairs
- EFMFX: Fiber optic EFM Module
  - Connector: SC Type
  - 100BASE-FX
- CEM: Circuit Emulation Module \*
  - 4/2 x E1 (G.703/G.704)
  - Timing & Synchronization Recovery

\* Circuit Emulation Service over Ethernet (CESoE)  
Module is scheduled to be released in 2Q 2008

### Line Module (Network Side)

- CSM: Control & Switching Module
  - One 10/100/1000 Base-T Ethernet Port, RJ45
  - One 100BaseFX or 1000BaseX (GigE), SFP

### Management Interface

- Craft Interface: RS-232 (RJ45),
- Web Browser (HTTP), SNMP, Telnet (Ethernet port, Inband VLAN Management)
- EFM (IEEE 802.3ah) OAM
- Proprietary RCMP (Remote Control & Management Protocol)

### Front Panel Indicators

- Line Module: Links status, Activity,
- Management/Uplink Card: Link, Activity, FAN status

### VLAN Support

- Port-based & Tag-based (802.1Q)
- up to 4096 VLANs
- Double Tagging (Q-in-Q)
- Priority Remapping

### QoS Support

- Rate control
- Egress Traffic Shaping
- Classification based on Port/802.1p/DSCP
- 4 Priority Queues
- Strict Priority
- Simple WFQ

### Production & Regulatory

- ISO 9001 Quality Management
- ISO 14001 Environmental Management
- CE Approval
- VCCI Approval

FACT SHEET