

## Versatile Dual Port E3 Line Interface Module

### INTRODUCTION

The operational capabilities of an Xedge switch is determined in part by the slot controller in use and the number and type of associated line interface modules (LIMs). The Xedge E3-2C LIM provides two ports of E3 circuit emulation for its slot controller. The LIM operates at 34.368 Mbs via two 75-ohm BNC connectors per port.

The Xedge E3-2C is an enhanced clocking LIM that supports timing from three sources: the received clock, the system clock reference, and an internal oscillator on the LIM. In addition, the LIM can loop the receive clock back to the transmit clock and also propagate the derived clock across the midplane of the switch to provide a timing reference for other LIMs.

The Xedge E3-2C LIM is used with the following Xedge slot controllers:

- Xedge PCX (Packet Cell Switch)
- Xedge PCL (Packet Cell Link)
- Xedge PCE (Packet Circuit Emulator)
- Xedge CE (Circuit Emulator)
- Xedge ACP (ATM Controller PDH)

Other slot controller and LIM combinations may also be supported in your network. Contact your GDC representative for more information.

### LIM Features

- Dual port 34.368 Mbps interface
- For ATM and Circuit Emulation applications
- Comprehensive alarm reporting and performance monitoring
- Meets North American transmission standards

### Specifications

- Standards: ITU-T G.703, G.804, G.751, G.832, I.432, ATM Forum UNI 3.1, IISP, B-ICI 1.1
- Interface: E3
- Connector Type: BNC 75 ohms
- Line Encoding: HDB3
- Framing: G.832, G.751, or Unframed
- Transmit Line: Automatic, 0 dB to 13.2 dB, 4 increments
- Transmit Timing: From received clock; internal oscillator; primary or secondary system reference (line of Node Timing Module)

### INTENDED USE

The E3-2C LIM installs behind its slot controller at the midplane connector to switch ATM cells at 34.368 Mbps, or to provide up to two ports of E3 circuit emulation per controller. Up to two LIMs plug into a compatible slot controller at the rear panel of the Xedge chassis.

### Diagnostics & Alarms

#### Loopbacks

The E3-2C supports Transmit, Receive, and Payload Loopbacks.

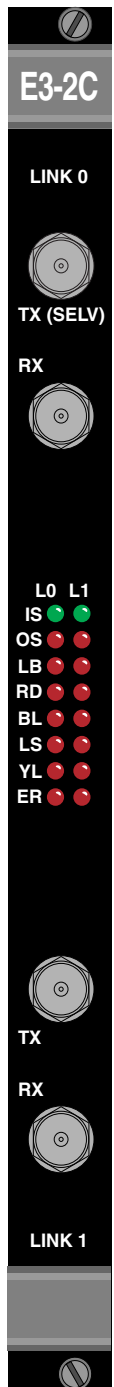
#### Status Indications

- IS (In service)
- OS (Out of service)
- LB Lights during loopback test
- RD Receive Red Alarm (Loss Of Frame)
- BL Receive Blue Alarm (AIS)
- LS Loss Of Signal
- YL Receive Yellow Alarm

#### Alarms & Performance

The E3-2C supports the physical layer alarms and performance monitoring statistics listed below:

- Alarm Indication Signal
- Alarm Indication Signal Seconds
- Errored Seconds
- Severely Errored Seconds
- Unavailable Seconds
- Far End Receiver Failure
- Line Coding Violations
- Line Errored Seconds
- Line Severely Errored Seconds
- Loss of Frame
- Loss of Signal



**Figure 1:** Front Panel Features of Xedge E3-2C LIM