# GENERAL DATACOMM

# Xedge DS3-2C LIM

## Versatile Dual Port
## T3 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 DS3-2C LIM provides two ports of DS3 circuit emulation for its slot controller. The LIM operates at 44.736 Mbs via two 75-ohm BNC connectors per port.

The Xedge DS3-2C 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 DS3-2C 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 44.768 Mbps interface
- For ATM and Circuit Emulation applications
- Comprehensive alarm reporting and performance monitoring
- Meets North American transmission standards

### Specifications

- ANSI T1.102, T1.107, T1.646, ITU-T G.804, I.432, ATM Forum UNI 3.0/3.1, IISP, B-ICI 1.1
- Interface: DS3
- Connector Type: BNC 75 ohms
- Line Encoding: B8ZS
- Framing Options: PLCP, C-bit, Clear Channel
- Line Build Out: Short/Long
- Transmit Timing for PLCP sublayer: From received clock; internal oscillator; primary or secondary system reference (line of Node Timing Module)

### INTENDED USE

The DS3-2C LIM installs behind its slot controller at the midplane connector to switch ATM cells at 44.768 Mbps, or to provide up to two ports of T-3 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 DS3-2C supports Transmit, Receive, and Payload Loopbacks.

*Status Indications*

- IS (In service)
- OS (Out of service)
- LB Kights during line loopback test
- RD Rcv Red Alarm (Loss of Frame)
- BL Rcv Blue Alarm (AIS)
- LS Loss Of Signal
- YL Receive Yellow Alarm (FERF)
- ER Rcv Line Error

*Alarms & Performance*

The DS3-2C supports the following physical layer alarms and performance monitoring stats:

Alarm Indication Signal, Alarm Signal Seconds, Yellow Alarm, C-bit Errored Seconds, C-bit Parity Code Violation, C-bit Severely Errored Seconds, Errored Seconds, Severely Errored Seconds, Unavailable Seconds, Far End Code Violations, Far End Errored Seconds, Line Coding Violations, Line Errored Seconds, Line Severely Errored Seconds, Loss of Cell Delineation, Loss of Frame, Loss of Signal, P-bit Parity Coding Violations.

PLCP Code Violations, PLCP Errored Seconds, PLCP Far End Code Violations, PLCP Far End Errored Seconds, PLCP Far End Severely Errored Seconds, PLCP Far End Unavailable Seconds, PLCP Loss Of Frame, PLCP Severely Errored Seconds, PLCP Unavailable Seconds, PLCP Yellow Alarm
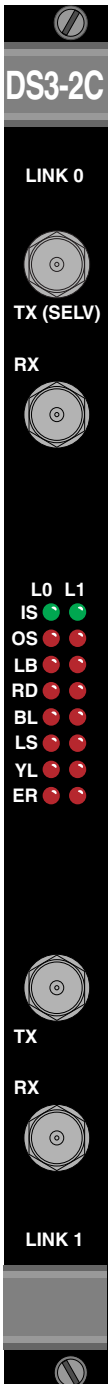


**Figure 1**: *Front Panel Features of Xedge DS3-2C LIM*