

Xedge Packet Cell Link Controller with Flexible Cell Relay Transport



PCL-DS1/IMA to DS3 ATM or PCL-E1/IMA to E3 ATM



Introduction to Xedge PCL

The Xedge Packet Cell Link (PCL) is a cost effective solution for concentration of end user traffic to a service provider's ATM service or, in a private network, as a branch office solution connecting remote sites running multiservice applications back to main or headquarter sites.

Housed in the compact 1RU Xedge 6002 chassis, the PCL offers versatile and reliable performance in a standards based platform. The PCL enables DS3 or E3 ATM cell traffic across bonded IMA links (DS1 or E1). The PCL features a 16 port DS1 or a 16 port E1 IMA module. Each module can support one or two groups of 8 physical DS1 or E1 links. The bonded group(s) can be combinations of 2, 4, or 8 links. Both the DS1 and the E1 module can support individual DS1 or E1 ATM UNI-NNI links that are not part of a group.

The PCL DS3 and E3 modules are standard interfaces supporting ATM transmission. These line interfaces modules (LIMs) such as the IMA LIMs, plug directly into an available slot of the Xedge chassis. A user selectable option permits the choice of PLCP or HEC formats.

The PCL is part of GDC's next generation MultiService Packet Exchange platform (MSPx) that offers end users and operators flexible and modular technologies that support multi-protocol applications. As networks evolve to more packet based technologies and services, the Xedge MSPx platform can converge protocols such as TDM, ATM, Frame Relay, Ethernet, and IP across emerging packet based MPLS, Ethernet, and IP backbones.

Highlights

- Cost-effective DS1 IMA to DS3 or E1 IMA to E3 cell-relay transport
- ATM standard compliant ATMF UNI 3.1 solution
- Conformance with IMA 1.0 and IMA 1.1 standards
- NNI support for both DS1/E1 IMA or DS3/E3 ATM
- Fast Ethernet for management and/or Ethernet/IP data (up to 4 connections)
- ATM loopback and diagnostic of physical layer performance
- Optional choice of PLCP and HEC formats for DS3/E3
- Next generation platform supports migration to Ethernet/IP MPLS based solutions

High or Low Density Options

Typically, the Xedge PCL is positioned in slot-0 of the two-slot Xedge 6002 chassis. In a higher density Xedge chassis, the PCL can be installed in non-slot 0 positions to scale to user requirements for cell relay concentration.

The Xedge PCL slot controller plugs into two adjacent slots of an Xedge AC- or DC-powered chassis: Xedge 6002 (2 slots), Xedge 6160 (4 slots), Xedge 6280 (7 slots) and the 16-slot Xedge 6640/6645.

Figure 1 shows the Xedge PCL controller installed in the Xedge 6002 chassis.