

IP Access Gateway

The ioPLEX™ is an affordable, high-performance IP access gateway that offers support for more data types, higher aggregate throughput, and better operational reliability than other circuit emulation devices on the market today.

Featuring Assured Delivery™, in which diverse-path routing, packet reordering, and intelligent reconstruction technologies are employed to guarantee data delivery, ioPLEX is ideal for applications in which data loss during network transit is simply unacceptable. Designed to move up to 2 Gbps of data across the network and generally introducing less than a millisecond of added latency into multiplexed streams, ioPLEX is also appropriate for very high rate and/or high-priority data circuits.

In typical configurations, two or more ioPLEX units are deployed as edge devices on either side of a packet-switched network, such as an ATM, IP, VLAN, or MPLS WAN. Using pseudo-wire protocols (as defined by the IETF and IRIG-218 TMoIP) the ioPLEX encapsulates the native services for delivery over a meshed packet switched network.

Built into a compact 2U chassis, ioPLEX offers carrier-class performance, features, and availability at an enterprise price point. The unit is engineered to avoid single points of failure, with 1 to 1 redundancy for CPU boards, network adapters, and power supplies. All I/O modules and system components are hot-swappable, including CPUs and power supplies.

Applications

- High-port-density IP gateway for point-to-point, point-to-multipoint, and multicast with near real-time performance
- Replaces legacy TDM/ATM multiplexers, enabling migration to packet switched core networks
- Low-latency telemetry and command distribution for mission operations center and range applications (IRIG-218 TMoIP)
- Video multicast and distribution
- Support for encrypted serial data multiplexing and distribution
- Space lift launch services for gathering telemetry and video of space craft launch
- Data communications networking of ATM network islands over an IP routed or Ethernet switched network
- Terrestrial networking of ISR terminal sensor information



Key Features

- ✓ High reliability and availability: 1 to 1 redundancy, hot-swap for all modules means Telco grade equipment
- ✓ Dual GigE network interfaces (optical or copper) for packet network uplink, with IPv4 and IPv6 support
- ✓ I/O module options include T1/E1, multi-protocol serial (EIA-530, EIA/TIA-449, EIA/TIA-232, V.35, X.21, ECL, LVDS, Optical, and TTL), NTSC video, IRIG analog, wideband analog, 2-wire Voice, IP Forwarding, IP Multicast, and Ethernet bridging
- ✓ Dual ATM network interfaces (optical or copper) for cell based network uplink, with OC-12c/OC-3c 1+1APS and Serial RS-530
- ✓ Assured Delivery for critical data via diverse IP path routing, packet reordering, and intelligent reconstruction at endpoints and Packet FEC
- ✓ Supports synchronous and isochronous serial with automatic rate tracking
- ✓ High-quality, low-latency, robust video compression using JPEG2000
- ✓ T1 multiplexing and grooming, and voice transport with optional voice compression
- ✓ Interoperability tested with a wide range of network equipment, satellite modems, and DoD Encryptors

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SPECIFICATIONS AND FEATURES SUBJECT TO CHANGE.