



Data Sheet

Inteleflex Ethernet Uplink Card

Telstrat's Inteleflex™ Broadband Loop Carrier platform now offers an Ethernet (E-NET) uplink card, providing cost-effective packet based connectivity to core IP networks. E-NET card features include:

- **Low Cost Interface to Routers**
- **Aggregated Handoff for ADSL Traffic**
- **Simplified Connection Provisioning based on Service Profiles**
- **IGMP Snooping Support**
- **10Mbps or 100Mbps Operation**
- **Half and Full Duplex Operation**
- **Auto-Negotiation for Line Speed and Duplex Mode**
- **Integrated Bridging Capability**

The E-NET card gives Inteleflex an integrated interface for direct Ethernet connectivity to data routers or video headends. Broadband services may share a common Ethernet interface or multiple E-NET cards may be installed, one for each application.

Support for the combination Ethernet and ATM technologies allows service providers to directly deliver packet services to the Inteleflex Central Digital Terminal (CDT) over cost-effective Ethernet ports while preserving the value of

prioritized multi-service delivery over the local loop using ATM.

Leveraging Video Bandwidth using Ethernet

Ethernet makes a perfect complement to switched digital video services. The E-NET card permits the Inteleflex CDT to snoop IGMP messaging. With just a single copy of a given channel delivered to its Ethernet port, an Inteleflex CDT can distribute broadcast video traffic to multiple remote digital terminals (RDTs) using IGMP multicasting. Coupled with IGMP multicasting in the RDTs, this relieves the transport network from carrying multiple copies of identical video streams.

By offloading most of the IGMP message processing to the CDT, and even further downstream to each RDT, core routers are relieved of the task allowing the function to be distributed, improving both network performance and the customer experience.

Low Cost Data Service Aggregation

With the popularity of ADSL data services on the rise, the Inteleflex E-NET card provides the most cost-effective solution for aggregating ADSL traffic onto IP data networks.

All customer data traffic can be aggregated in the Broadband Loop Carrier (BLC) and handed off over a low cost Ethernet port for connection to the core IP network. A combination of ATM QoS in the local loop and Ethernet connectivity in the CO ensures that packet services are delivered both cost effectively and reliably.

Simplified Networking

The Inteleflex™ System 9.0 software's simplified provisioning requirements minimize the time and effort associated with network provisioning. Using predefined service profiles, ADSL ports can be quickly associated with an uplink Ethernet port, regardless of the hop count and network facilities used from host RDT to CDT.

With an ADSL service connection in place, no further configuration is needed thanks to the simplicity of Ethernet and the port's ability to auto-negotiate connection parameters with attached equipment. The simplified provisioning features constitute a great productivity tool for rapid and easy deployment of ADSL circuits.

The E-NET card resides in the CDT and aggregates traffic from local and remote ADSL ports. Both video and data traffic may be aggregated to a single Ethernet uplink. Alternatively, a CDT may be equipped with multiple Ethernet uplinks, each uplink aggregating a single application's traffic for improved performance.

The Inteleflex™ E-NET card provides transparent bridging, auto-sensing between 10 or 100 Mbps operation, and functions in either half or full duplex mode with routers, switches or hubs.

Specifications:

Line Speed

10/100Mbps – Auto-sensing

Traffic Modes

Full Duplex, Half Duplex – Auto-sensing

Filtering

Ethernet Learning Bridge

Electrical Characteristics

Media: 10BaseT (MDI)
100BaseTX (MDI)
FastE Connector: RJ-45
FastE T/R Connector: Wire wrap pins (tip and ring pair)

Physical

Dimensions: 7.25" H x 0.70" W x 10.38" D
(18.42 cm H x 1.78 cm W x 26.35 cm D)
Weight: 0.63lbs (0.29Kg)

Environmental

Operating Temperature: -40° C to +65° C (-40° F to +149° F)
Humidity: 5% to 95% non-condensing
Power: 9W

Standards Compliance

IEEE 802.3 (CSMA/CD Ethernet)
IEEE 802.3u (Fast Ethernet)
IEEE 802.1d (MAC bridging)

Ordering Information:

FastE Card Part Number: 207-2000
FastE T/R Card Part Number: 207-2010

Specifications subject to change without notice.

