

## Enhanced 5-slot Ethernet-based Modular Multi Service IP Broadband Loop Carrier 4000

### Video Ready, High-capacity Ethernet-based IP Broadband Loop Carrier for Central Office or Remote Terminal DSL deployments

#### Overview

Paradyne's IP Broadband Loop Carrier (BLC) 4000 provides a high capacity and native IP Ethernet foundation for the feature rich multi service access multiplexer modules in the IPD range.

The BLC 4000 is engineered for efficient, high-speed IP data transport in a compact, fully fault-tolerant chassis. Supporting high-density ADSL, ADSL2+, SHDSL, and T1/E1 access technologies, the Ethernet-based BLC 4000 is the optimal line aggregation platform for today's advanced IP-based access networks. Incumbents, Competitive Operators, and IP Network Service Providers are able to cost-effectively offer the full range of today's advanced broadband services, such as IP video, high-speed broadband Internet, and Voice over IP. Most importantly, these services can be delivered over a pure IP network without a dependency on ATM.

The BLC 4000 features a high capacity backplane delivering up to 8 Gbps throughput, and providing a non-blocking architecture for even the highest bandwidth broadband access technologies, such as ADSL2+. To ensure the long life of the product dual RJ-21 interfaces are provided for every slot. This means that the chassis can support higher port density modules without compromising the speed of connection to the backplane. Greater port density modules include the 48 port 2-wire (DSL) modules and the 24 port 4-wire (T1/E1) modules as they become available.

The BLC 4000 supports a single uplink, management and switching module connected to the dual backplanes with redundant modular backhaul/uplink ports to support 10/100 Ethernet, GigE (Copper or fiber), T1/E1 and dual bonded T1/E1 uplink modules. This module also provides SNMP, Web based, Telnet and CLI Management functionality to the modules in the chassis and provides a bi-directional configuration redundancy with the access modules providing an easy plug 'n' play hot swappable solution.

The BLC 4000 is environmentally hardened for installation in Remote Terminals or Street Cabinets.

For flexibility of installation the BLC 4000 has removable mounting brackets that can be placed in increments of 1.45" up to 9.28" from the front of the chassis, allowing for multiple installation options in either 19" or 23" equipment racks.

#### Features

- DSL the Easy Way™ Architecture delivers plug 'n' play Loop Bonded lines with NO configuration requirements
- Full range of management options from switch, uplink and management card in the Multi Service Chassis
- 8 Gbps uplink capacity and 8 Gbps backplane capacity provides a true non-blocking architecture
- 4 Access Modules slots provide up to 192 subscriber lines per chassis (1012 lines per 7' equipment rack)
- Single Multiplexer Uplink Module slot supports redundant 10/100, GigE (copper and fiber), T1/E1 (dual bonded T1/E1), or DS3/E3 Uplink Interface Modules
- Redundant -48V DC or AC Power (with AC to DC power converter)
- Compact NEBS compliant chassis is only 4 Rack Units high
- Variable mounting options for flexible installations in 19" or 23" equipment racks
- All modules are hot swappable
- AutoRestore and bi-directional configuration redundancy with the access modules providing an easy plug 'n' play hot swappable solution

## Specifications

### Dimensions

7" (17.8cm)(4 Rack Units) High x 17" (43.2cm) Wide x 18" (46cm) Deep

### Weight

28 lbs (12.73 kg) (chassis only)

### Power

AC — Requires External AC to -48 Volt DC Power Converter

DC — Dual -48 Volt DC Terminal Blocks

10 A maximum; 5.5 A typical\*

\*actual power consumption dependent upon chassis configuration

### Interfaces

5 slot chassis:

- 4 Access Module slots (front)
- 1 Multiplexer Uplink Module slot (front)
- 8 RJ-21 Telco Connectors (rear)

### Regulatory Compliance

NEBS: GR-63-CORE, GR-1089-CORE

EMC: FCC Part 15; CSA/C108.8; EN55022; EN55024

CE Marking

Safety: UL1950, CSA C22.2 No. 950; EN60950

CE Marking

### Operating Requirements

Temperature: -40°F to 149°F (-40°C to 65°C)

Non-operating temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 5% to 95%, non-condensing

Altitude: -200ft to 16,600ft (-60m to 5,000m)

## Ordering Information

IPD4000E-19	Enhanced Multi Service IP Broadband Loop Carrier Supports (1) Uplink Modules & (4) Access Modules; ships with 19" variable rack mount brackets
IPD4000E-23	Enhanced Multi Service IP Broadband Loop Carrier Supports (1) Uplink Modules & (4) Access Modules; ships with 23" variable rack mount brackets
IPD4000E-RMB19	19" variable rack mount brackets for the IPD4000E
IPD4000E-RMB23	23" variable rack mount brackets for the IPD4000E



For additional information on this or any Paradyne product or service, contact the office nearest you or dial 1.800.727.2396 (USA and Canada) or 1.727.530.8623; fax 1.727.530.8216. For international locations, visit the Paradyne web site at <http://www.paradyne.com>