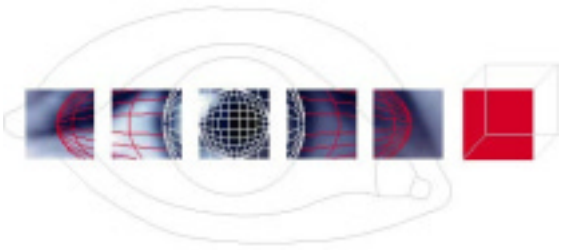
# COE X-class ONU



## Network management and Optical Network Unit

The Optical Network Unit (ONU) is the heart of the X-class system providing the management and network interfaces for both copper and optical fibre. It manages the application cards and power supply(s) within one X-class chassis (node) and the communications between X-class nodes. A comprehensive HTML based management system is included and can be accessed via Internet Explorer web browser. All system parameters are accessed via the HTML management system, enabling fast and in-depth information access without the need for sophisticated hardware or software from any location on the Network.

### System Features and Benefits

- Ethernet IP network manager incorporating IGMP and spanning tree algorithm - Latest network features supported for one-to-many and many-to-many video communications and 'best transmission path' management
- Options for copper 100BT or multimode and singlemode network interfaces - inter-node transmission up to 40km - X-class node interconnection can be achieved using CAT5 or optical fibre depending upon application and cable type
- Two network ports provided to enable linear, star and ring network topologies to be realised - Versatile networks may be built up without the need for additional IP LAN products, thus reducing costs
- Fully compliant with Ethernet network products, enabling fixed or mobile IP systems to be developed - Applications such as track to train, emergency services and LAN/WAN expansion etc.
- Management reporting of system health through front panel LEDs and HTML management interface - Fast and easy identification of potential problems, resulting in reduced maintenance cycle times using standard browsers
- Management and system support software included for network and application card configuration and monitoring - Performance monitoring and software upgrades may be carried out from anywhere on the network, dramatically improving maintenance and management tasks
- Support for optical bypass switch for node isolation in the event of catastrophic node failure or maintenance tasks - The node may be totally isolated from the network thus allowing repair/maintenance tasks to be carried out in a controlled manner

### General product configuration

This single module manages all cards within a single X-class node. It establishes the communications with other ONUs across the network, manages redundant ring configurations automatically repairing the ring upon failures. Reporting is provided via a simple HTML based web interface that is password protected for security. Access to this may be via a PC or PDA or any device that supports HTML. The password system allows simple read-only access through to full configuration.

## ONU HTML menu page


## Diagnostic rack alarm page


## Product Coding

XNONU X X

**Top network connection module:**

CU = Twisted pair 10/100BaseT
MM = Dual fibre multimode 100BaseFX
SL = Low power dual fibre singlemode 100BaseFX
SH = High power dual fibre singlemode 100BaseFX

**Bottom network connection module:**

CU = Twisted pair 10/100BaseT
MM = Dual fibre multimode 100BaseFX
SL = Low power dual fibre singlemode 100BaseFX
SH = High power dual fibre singlemode 100BaseFX

## Specifications

### Network

| | |
|---|---|
| Type | Ethernet 100BaseT backbone with multi-casting support |
| Interface types | Two 100Mb/s network ports provided, user configurable |
| Interface options | - Copper CAT5 via RJ45 connector 100Mb/s data rate<br>- Multimode 2km link, duplex SC connector, 50/125 or 62.5/125 fibre<br>- Singlemode 15km or 40km option, duplex SC connector, 9/125 fibre |
| Additional ports | Two 10BaseT ports for local hub/ switch/PC links for network expansion |

### System Management

| | |
|---|---|
| Access | HTML web pages via network or single point RS232 port (15pin female D-type connector) on front panel (default baud rate 57.6kb/s) |

### Local monitoring - (Front panel LEDs for:)

| | |
|---|---|
| Internal card comms | Yellow LED x 2 |
| ONU processor status | Green LED x 1 |
| Optical bypass switch | Yellow LED x 2 |
| Network 100BT ports | Yellow LED x 2 per port |
| Power status | DC supply voltage - Green and Red LED |
| PSU temperature | Red LED for alarm point |

### Auxiliary I/O - (15pin female D-type connector)

| | |
|---|---|
| Optical bypass | Control output relay contacts |
| Fan control | External fan control with failure monitor |
| Alarm output | Single relay, programmable action, for alarm monitoring systems (mapped in software to alarms) |

### Mechanical

| | |
|---|---|
| Card size | 220 x 100mm x 14HP |

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In line with the company policy of continuous improvement, COE reserves the right to vary descriptions and specifications without notice.

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