

# ALWAYS CONNECTED

# Element NT Point-to-Point Series

Element-NT Network Terminator



The Hybrid product family marks the embodiment of a new vision for FTTH. It separates the service layer from the network layer, resulting in a modular, cost-effective and flexible home gateway solution matching all types of FTTH networks. The Element-NT network terminator provides a managed demarcation point for the operator's network.

#### Features

- » Cost-effective network terminator
- » Supports Gigabit and 100Mbps fiber uplinks
- » Provides Ethernet connectivity for up to three devices
- » Powers Universe-CATV & Hybrid Live!
- » Management via SNMP, DHCP/TFTP or GAPS
- » Optional Element Masque to cover Element, moothens the design and enables customer branding
- » Fully compatible with all Hybrid Live! service modules, through the Hybrid Interface
- » Direct wall-mounting optional

Based on a full Gigabit interface, it translates the optical signal into tangible services through the click-on Live! residential gateway, and up to two devices connected via standard RJ45 connectors.

The Element-NT series is designed for Point-to-Point Ethernet networks.

# Network demarcation

The Element-NT forms a cost-effective managed network demarcation point. It offers termination of the FTTH transport layer and multiple paths to the service layer. Services can be activated by simply connecting a Hybrid Live! module, or connecting a residential gateway or other devices via standard Ethernet interfaces.

# **Element NT - Point-to-Point Series**

# **Features & Specifications**

# **General specifications**

- » Dimensions (H x W x D) 223x104x45mm
- Weight

200 g

- » Power supply voltage 12 Vdc ± 10%
- Operating conditions
- 0 40 °C
- Storage conditions

0 - 70 °C

# LAN interface

» 2x 1000/100/10Base-T RJ45 Interfaces

#### **WAN** interface

- » Compliant with IEEE 802.3 Clause 59 1000BASE-BX10-U)
- » Compatible with IEEE 802.3 Clause 58 (100BASE-BX10-U)
- » Single mode fibre (ITU-T G.652)
- » SC/PC connector
- » Full duplex transmission
- » TX 1310 nm
- » RX 1480 1580 nm
- » 10 km range
- » > 12 dB power budget
- » Class 1 laser product
- » Transmit power

-3 ... -9 dBm

Receive power

-3 ... -21 dBm

# **CATV** control

- » Powering for Universe-CATV unit
- Remotely enable CATV
- Remote monitoring of CATV input

# Hybrid interface

- Gigabit Ethernet electrical interface
- Supports any Hybrid Live! module

#### Layer 2 features

- » Wirespeed forwarding
- Managed Quality of Service
- Port enable
- External per port rate shaping and limiting
- » Up to 64 VLANs
- Q-in-Q
- Link state forwarding

# **Emission and safety regulations**

- » CE, FCC approved
- Safety:
  - IEC EN 60950
  - IEC EN 60825-1:2001-08
- » Emissions & Immunity:
  - EN 55022/CISPR 22:2008, Class B
  - EN 55024
- » RoHS/WEEE marking:

# Compliant with 2002/95/EC Management

- Genexis Automatic Provisioning System (GAPS)
- Passive IEEE802.3ah operation
- SNMP statistics
- DHCP/TFTP
- » IEEE 802.3ah OAM in passive mode:
- » Discovery
- Loopback
- Fault notification (dying gasp)

# Status LEDs

 $\bigcirc$ Power

<> Fiber uplink status

 $\bigcirc$ CATV status

# **Element NT Point-to-Point Series product models**

Model	WAN Fibre (Mbps)	Hybrid Interface Slots	LAN Interfaces	Universe CATV Power
Element-P1132	100/1000	1x	2x	yes