



FTTx Primary Node Closure

Underground primary node

Product Overview

The Hexatronic primary node is based upon the ODC2 closure range. Cassettes are pre-loaded with PLC splitters and routed as per CityFibre guidelines. With the ability to feed up to 13x secondary node cabinets or 26x aerial secondary nodes.

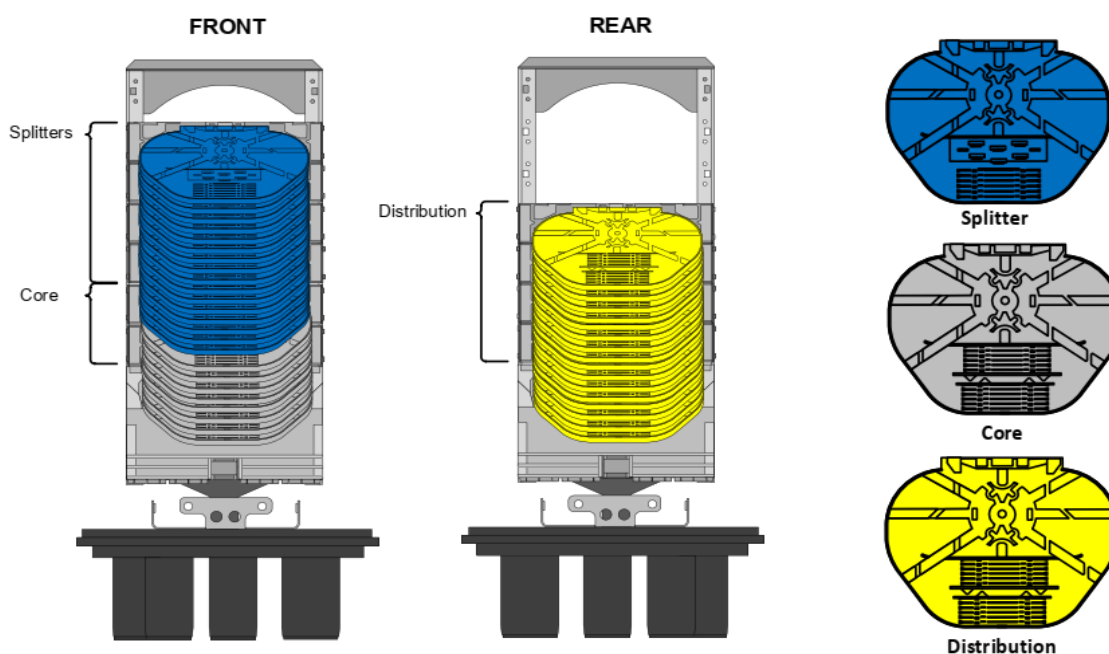
Primary Node Configuration

To reduce the volume taken by the primary node in a footway box the Hexatronic proposal is to have a dual raceway primary node. The advantages of this solution are the reduced height requirements.

Single stack options are available if required.

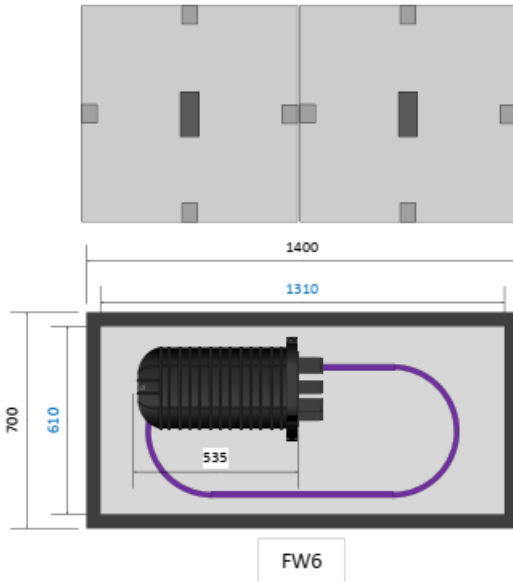
Features

- Cold seal sealing (Essential for micro cable)
- Excellent mechanical and environmental protection
- Suitable for aerial and underground environments
- Dome closure sealed with clamp and O-ring system
- Compatible with all Hexatronic standard cables
- Working temperatures -40°C to $+70^{\circ}\text{C}$



Compact Dome

The dual stack primary node makes it ideal for UK chambers with such a small volume consumed, additional space is available for cable and duct storage.

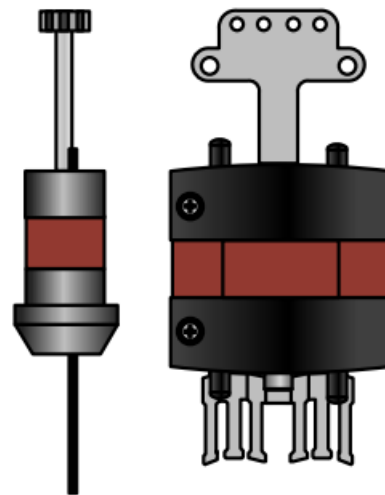


Modular Cable Sealing Options

Cable entry ports to the primary node are modular and can accept multiple cables.

An oval port is generally used in isolation as it can facilitate a midspan cable and also branch 2x additional cables.

The single mechanical compression gland can be included with the primary node to expedite installation efficiency further.



Mechanical and Environmental

| Parameter | Test | Value |
|----------------------------------|--|-----------------------|
| Temp Cycling | -40 / +70c IEC 61300-2-22 | No Attenuation Change |
| Water Immersion | 20 +/- 2C IEC 61300-2-45 | No Attenuation Change |
| Combined Temp / Humidity | 10 Cycles 20, 65, 20, 65, 20, -10, 20 IEC 60068 | No Attenuation Change |
| Vibration | IEC 61300-2-1 | No Attenuation Change |
| Shock (15g) | IEC 61300-2-1 | No Attenuation Change |
| Torsion (2N each Fibre) | IEC 61300-2-1 | No Attenuation Change |
| Vibration (10-500 Hz, 10 Cycles) | IEC 61300-2-1 | No Attenuation Change |

Optical Performance

1x4 PLC Splitter

| Parameter | Unit | Value |
|---------------------------------|------|--|
| Operating Wavelength | nm | 1260~1650 |
| Insertion Loss | dB | 7.0 |
| Uniformity (Max.) | dB | 0.8 |
| PDL(Max.) | dB | 0.2 |
| TDL(Max.) | dB | 0.5 |
| Return Loss | dB | ≥55(APC type connectors) / 50(UPC type connectors) |
| Directivity | dB | ≥55 |
| Working power | | Long term: 500mW Short term: 1W |
| Operating & Storage Temperature | °C | -40~+85 |

Pre-Staged Nodes

Primary nodes are pre-configured to CityFibre specifications. (13SN example shown below)

| | | | | | |
|----------------------------------|--|--|----------------------|--|--|
| Output Tails From Splitter Trays | East Splitter 10 From Splitter Tray 8 West Splitter 10 From Splitter Tray 8 East Splitter 10 From Splitter Tray 8 West Splitter 10 From Splitter Tray 8 | Orange SPlice TO Blue Violet SPlice TO Orange Orange SPlice TO Green Violet SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 13 | Fibre 1 SW13 Splitter 1 Fibre 2 SW13 Splitter 2 Fibre 3 SW13 Splitter 3 Fibre 4 SW13 Splitter 4 Fibre 5 SW13 Splitter 5 Fibre 6 SW13 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 13 |
| Output Tails from Splitter Trays | East Splitter 9 From Splitter Tray 7 West Splitter 9 From Splitter Tray 7 East Splitter 9 From Splitter Tray 7 West Splitter 9 From Splitter Tray 7 | Blue SPlice TO Blue Brown SPlice TO Orange Blue SPlice TO Brown Brown SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 12 | Fibre 1 SW12 Splitter 1 Fibre 2 SW12 Splitter 2 Fibre 3 SW12 Splitter 3 Fibre 4 SW12 Splitter 4 Fibre 5 SW12 Splitter 5 Fibre 6 SW12 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 12 |
| Output Tails From Splitter Trays | East Splitter 9 From Splitter Tray 7 West Splitter 9 From Splitter Tray 7 East Splitter 9 From Splitter Tray 7 West Splitter 9 From Splitter Tray 7 | Blue SPlice TO Blue Brown SPlice TO Orange Blue SPlice TO Green Brown SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 11 | Fibre 1 SW11 Splitter 1 Fibre 2 SW11 Splitter 2 Fibre 3 SW11 Splitter 3 Fibre 4 SW11 Splitter 4 Fibre 5 SW11 Splitter 5 Fibre 6 SW11 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 11 |
| Output Tails From Splitter Trays | East Splitter 3 From Splitter Tray 3 West Splitter 3 From Splitter Tray 3 East Splitter 5 From Splitter Tray 5 West Splitter 5 From Splitter Tray 5 | Green SPlice TO Blue Black SPlice TO Orange Slate SPlice TO Green Pink SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 10 | Fibre 1 SW10 Splitter 1 Fibre 2 SW10 Splitter 2 Fibre 3 SW10 Splitter 3 Fibre 4 SW10 Splitter 4 Fibre 5 SW10 Splitter 5 Fibre 6 SW10 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 10 |
| Output Tails From Splitter Trays | East Splitter 3 From Splitter Tray 3 West Splitter 3 From Splitter Tray 3 East Splitter 5 From Splitter Tray 5 West Splitter 5 From Splitter Tray 5 | Green SPlice TO Blue Black SPlice TO Orange Slate SPlice TO Green Pink SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 9 | Fibre 1 SW9 Splitter 1 Fibre 2 SW9 Splitter 2 Fibre 3 SW9 Splitter 3 Fibre 4 SW9 Splitter 4 Fibre 5 SW9 Splitter 5 Fibre 6 SW9 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 9 |
| Output Tails From Splitter Trays | East Splitter 2 From Splitter Tray 2 West Splitter 2 From Splitter Tray 2 East Splitter 5 From Splitter Tray 5 West Splitter 5 From Splitter Tray 5 | Orange SPlice TO Blue Violet SPlice TO Orange Slate SPlice TO Green Pink SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 8 | Fibre 1 SW8 Splitter 1 Fibre 2 SW8 Splitter 2 Fibre 3 SW8 Splitter 3 Fibre 4 SW8 Splitter 4 Fibre 5 SW8 Splitter 5 Fibre 6 SW8 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 8 |
| Output Tails From Splitter Trays | East Splitter 2 From Splitter Tray 2 West Splitter 2 From Splitter Tray 2 East Splitter 5 From Splitter Tray 5 West Splitter 5 From Splitter Tray 5 | Orange SPlice TO Blue Violet SPlice TO Orange Slate SPlice TO Green Pink SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 7 | Fibre 1 SW7 Splitter 1 Fibre 2 SW7 Splitter 2 Fibre 3 SW7 Splitter 3 Fibre 4 SW7 Splitter 4 Fibre 5 SW7 Splitter 5 Fibre 6 SW7 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 7 |
| Output Tails From Splitter Trays | East Splitter 2 From Splitter Tray 2 West Splitter 2 From Splitter Tray 2 East Splitter 4 From Splitter Tray 4 West Splitter 4 From Splitter Tray 4 | Orange SPlice TO Blue Violet SPlice TO Orange Red SPlice TO Green White SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 6 | Fibre 1 SW6 Splitter 1 Fibre 2 SW6 Splitter 2 Fibre 3 SW6 Splitter 3 Fibre 4 SW6 Splitter 4 Fibre 5 SW6 Splitter 5 Fibre 6 SW6 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 6 |
| Output Tails From Splitter Trays | East Splitter 2 From Splitter Tray 2 West Splitter 2 From Splitter Tray 2 East Splitter 4 From Splitter Tray 4 West Splitter 4 From Splitter Tray 4 | Orange SPlice TO Blue Violet SPlice TO Orange Red SPlice TO Green White SPlice TO Red Laid UP Slate Laid UP Yellow | Distribution Tray 5 | Fibre 1 SW5 Splitter 1 Fibre 2 SW5 Splitter 2 Fibre 3 SW5 Splitter 3 Fibre 4 SW5 Splitter 4 Fibre 5 SW5 Splitter 5 Fibre 6 SW5 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 5 |
| Output Tails From Splitter Trays | East Splitter 1 From Splitter Tray 1 West Splitter 1 From Splitter Tray 1 East Splitter 4 From Splitter Tray 4 West Splitter 4 From Splitter Tray 4 East Splitter 6 From Splitter Tray 6 West Splitter 6 From Splitter Tray 6 | Blue SPlice TO Blue Brown SPlice TO Orange Red SPlice TO Green White SPlice TO Red Yellow SPlice TO Slate Aqua SPlice TO Yellow | Distribution Tray 4 | Fibre 1 SW4 Splitter 1 Fibre 2 SW4 Splitter 2 Fibre 3 SW4 Splitter 3 Fibre 4 SW4 Splitter 4 Fibre 5 SW4 Splitter 5 Fibre 6 SW4 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 4 |
| Output Tails From Splitter Trays | East Splitter 1 From Splitter Tray 1 West Splitter 1 From Splitter Tray 1 East Splitter 4 From Splitter Tray 4 West Splitter 4 From Splitter Tray 4 East Splitter 6 From Splitter Tray 6 West Splitter 6 From Splitter Tray 6 | Blue SPlice TO Blue Brown SPlice TO Orange Green SPlice TO Green Black SPlice TO Red Yellow SPlice TO Slate Aqua SPlice TO Yellow | Distribution Tray 3 | Fibre 1 SW3 Splitter 1 Fibre 2 SW3 Splitter 2 Fibre 3 SW3 Splitter 3 Fibre 4 SW3 Splitter 4 Fibre 5 SW3 Splitter 5 Fibre 6 SW3 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 3 |
| Output Tails From Splitter Trays | East Splitter 1 From Splitter Tray 1 West Splitter 1 From Splitter Tray 1 East Splitter 3 From Splitter Tray 3 West Splitter 3 From Splitter Tray 3 East Splitter 6 From Splitter Tray 6 West Splitter 6 From Splitter Tray 6 | Blue SPlice TO Blue Brown SPlice TO Orange Green SPlice TO Green Black SPlice TO Red Yellow SPlice TO Slate Aqua SPlice TO Yellow | Distribution Tray 2 | Fibre 1 SW2 Splitter 1 Fibre 2 SW2 Splitter 2 Fibre 3 SW2 Splitter 3 Fibre 4 SW2 Splitter 4 Fibre 5 SW2 Splitter 5 Fibre 6 SW2 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 2 |
| Output Tails From Splitter Trays | East Splitter 1 From Splitter Tray 1 West Splitter 1 From Splitter Tray 1 East Splitter 3 From Splitter Tray 3 West Splitter 3 From Splitter Tray 3 East Splitter 6 From Splitter Tray 6 West Splitter 6 From Splitter Tray 6 | Blue SPlice TO Blue Brown SPlice TO Orange Green SPlice TO Green Black SPlice TO Red Yellow SPlice TO Slate Aqua SPlice TO Yellow | Distribution Tray 1 | Fibre 1 SW1 Splitter 1 Fibre 2 SW1 Splitter 2 Fibre 3 SW1 Splitter 3 Fibre 4 SW1 Splitter 4 Fibre 5 SW1 Splitter 5 Fibre 6 SW1 Splitter 6 | Outgoing Distribution Fibre to Secondary Node 1 |

Underground Primary Node serving 13 Secondary Nodes Distribution Trays:

| | | | | |
|---|---|-------------|--|--|
| Incoming Core Fibre from the East to West via DDP | Tube 4 Fibre 1 Blue SPlice TO Brown Tube 4 Fibre 2 Orange SPlice TO Violet Tube 4 Fibres 3-12 SPliced THROUGH Tube 4 Fibre 1 Blue SPlice TO Brown Tube 4 Fibre 2 Orange SPlice TO Violet Tube 4 Fibres 3-12 SPliced THROUGH | Core Tray 3 | West Splitter 9 From Splitter Tray 7 West Splitter 10 From Splitter Tray 8 West Core Spliced to East Core Cable East Splitter 9 From Splitter Tray 7 East Splitter 10 From Splitter Tray 8 East Core Spliced to West Core Cable | Input Tails From Splitter Trays from East to West Core Cable |
| Incoming Core Fibre from the East to DDP | Tube 1 Fibre 1 Blue SPlice TO Blue Tube 1 Fibre 2 Orange SPlice TO Orange Tube 1 Fibre 3 Green SPlice TO Green Tube 1 Fibre 4 Red SPlice TO Red Tube 1 Fibre 5 Slate SPlice TO Slate Tube 1 Fibre 6 Yellow SPlice TO Yellow | Core Tray 2 | East Splitter 1 From Splitter Tray 1 East Splitter 2 From Splitter Tray 2 East Splitter 3 From Splitter Tray 3 East Splitter 4 From Splitter Tray 4 East Splitter 5 From Splitter Tray 5 East Splitter 6 From Splitter Tray 6 | Input Tails From Splitter Trays |
| Incoming Core Fibre from the West to DDP | Tube 1 Fibre 1 Blue SPlice TO Brown Tube 1 Fibre 2 Orange SPlice TO Violet Tube 1 Fibre 3 Green SPlice TO Green Tube 1 Fibre 4 Red SPlice TO Red Tube 1 Fibre 5 Slate SPlice TO Slate Tube 1 Fibre 6 Yellow SPlice TO Yellow | Core Tray 1 | West Splitter 1 From Splitter Tray 1 West Splitter 2 From Splitter Tray 2 West Splitter 3 From Splitter Tray 3 West Splitter 4 From Splitter Tray 4 West Splitter 5 From Splitter Tray 5 West Splitter 6 From Splitter Tray 6 | Input Tails From Splitter Trays |

Ordering Information

Part number

CFNB-PRI-104-xxSN

Description

U/G Primary Node