

# Ethernet Access Direct

Ethernet Access Direct (EAD) provides point-to-point data connectivity between sites. It can be used to **build and extend customer networks, develop new infrastructure, and meet low & high capacity backhaul requirements (up to 10Gbps).**

EAD supports a range of requirements including; cloud computing, simultaneous online pupil access in classrooms and storage area network connectivity.

## Product benefits

### Resilience ‘in the box’

A choice of affordable protection against fibre breaks and unforeseen issues offers peace of mind for critical connections.

### Powerful diagnostics

The ability to test your own circuits gives you more control and could mean faster repair. All in all, a better end customer experience.

### New 4U Modular Chassis

Back to back chassis installation offers you the potential to save money in the exchange.

### CAS(T) certified

All EAD variants meet the security standards required to support Government network bids.

### Symmetrical speeds

Same speed available on both upload and download.

### Flexible

Can provide secure links between a combination of end customer sites, CP networks and sites and BT exchanges.

### Attractive pricing

Competitive rentals and contract terms offer the potential to attract more business.

### Environmentally considerate

Enhanced remote diagnostic capability means fewer truck rolls needed.

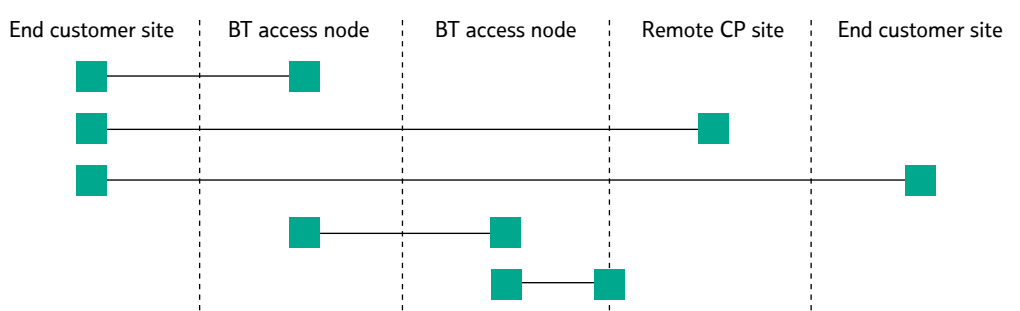
### Future proof

A next generation compatible service and the focus of future innovation and pricing initiatives.

### Nationwide coverage

National network with 21,000+ engineers qualified to work underground, overhead and in secure and sensitive environments.

## Connection capabilities



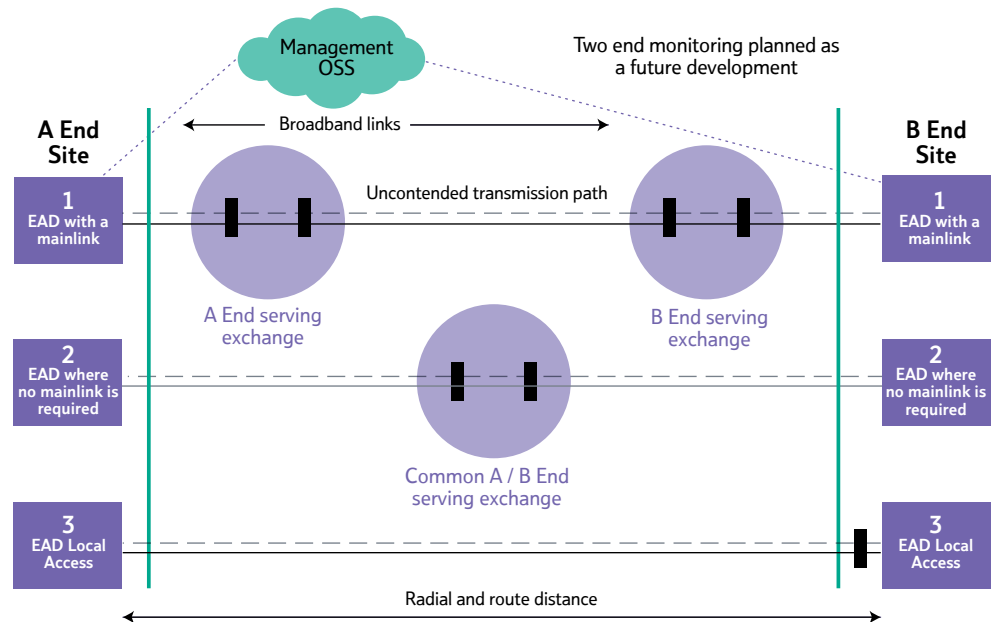
## Product features

- Permanently connected, point-to-point high speed data circuits
- IEEE (Ethernet specification) compliant
- Optical fibre cable offering uncontended bandwidth with no usage limits
- Chassis with front facing fans, power units and cabling
- Two NTE options: ADVA FSP150 4U Multi-slot & FSP150 CPMR
- FSP150 4U Multi-slot (NGN Modular NTE) can terminate up to 15 services
- Electrical and optical customer client port presentation – dependent on product selected
- EAD 10Gbps uses 1U NTE at each end that can support Synchronous Ethernet (SyncE) and PTP1588v2 T-BC (Phase Synchronisation)
- Individual (single port presentation) point-to-point Ethernet circuits:
  - 100 Mbps 100 BaseT copper interface
  - 1000 Mbps 1000 BaseSX Multimode dual fibre working interface
  - 1000 Mbps 1000 BaseLX Single-mode dual fibre working interface
  - 10 Gbps.
- Circuits are managed by FSP Network Manager with a WEB GUI interface and using NGN tools for activating self tests and PACS for configuring
- Portal Loopback capability
- User and Network Link Loss Forwarding.

## Circuit reach

- **Maximum radial distance:**
  - Via eCo-x EAD 100Mbps = 25km
  - EAD 1Gbps = 35km
  - Via EMP EAD 100Mbps and 1Gbps = 45km
  - EAD 10Gbps = 25km
- **Maximum route distance:**
  - Via eCo-x EAD 100Mbps = 40km
  - EAD 1Gbps = 66km
  - Via EMP EAD 100Mbps and 1Gbps = 86km
  - EAD 10Gbps = 40km
- EAD Local Access provides access as far as the fibre serving exchange.

## How it works



This diagram shows three separate circuits:

1. EAD with a mainlink
2. EAD where no mainlink is required
3. EAD Local Access (no mainlink)

## Available bandwidths\*

100Mbps	1Gbps	10Gbps
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\* EAD, EAD LA 100Mbps and 1Gbps and EAD Extended Reach (ER) 1Gbps are available via eCo-x and EMP. EAD Extended Reach (ER) 10Mbps, 100Mbps and 10Gbps are only available via EMP.

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