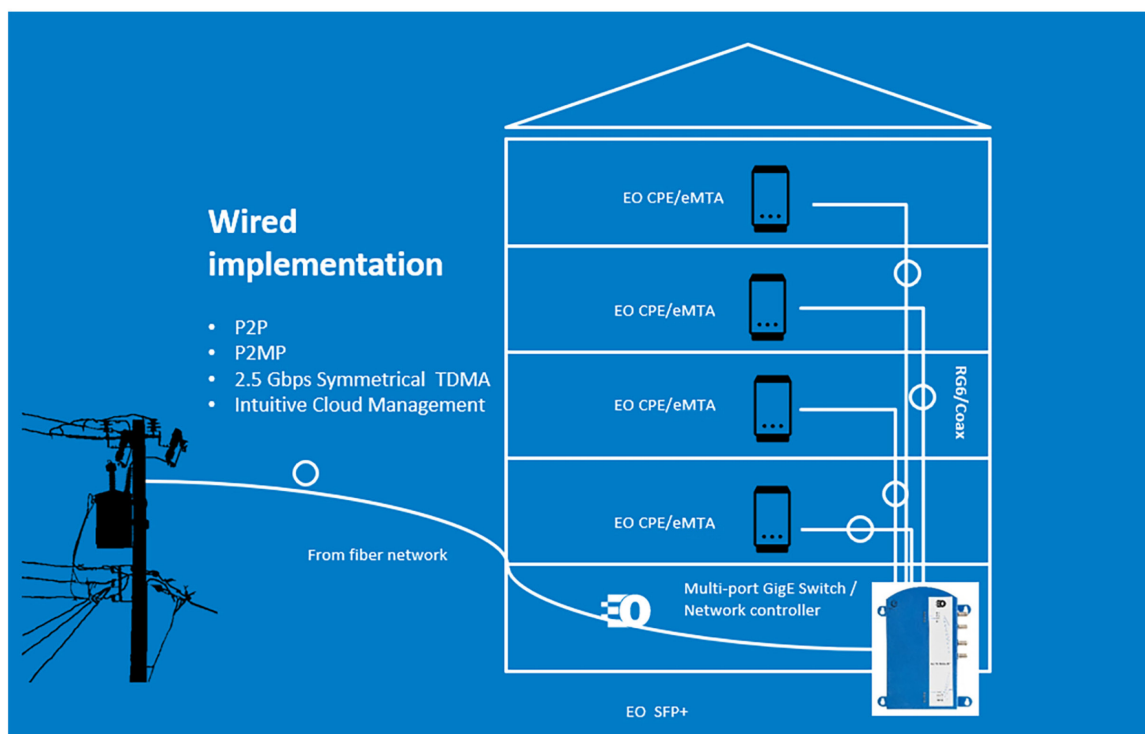# Intercept™ **EO** Gigabit Coax in Building System

The Intercept™ **EO** solution delivers Multigigabit data rates over existing legacy coaxial cabling for rapid and economical deployment in MDU, enterprise or campus environments.

Capable of data rates of up to 2.5 Gbps downstream and up to 2 Gbps in the upstream, **EO** is highly competitive with FTTH services, at a fraction of the cost of an all fiber solution relative to installation cost. The **EO** suite of network controllers provides full featured functionality and management capabilities for intuitive subscriber management and superior QoE, time to market and rapid activation and implementation of revenue generating services.
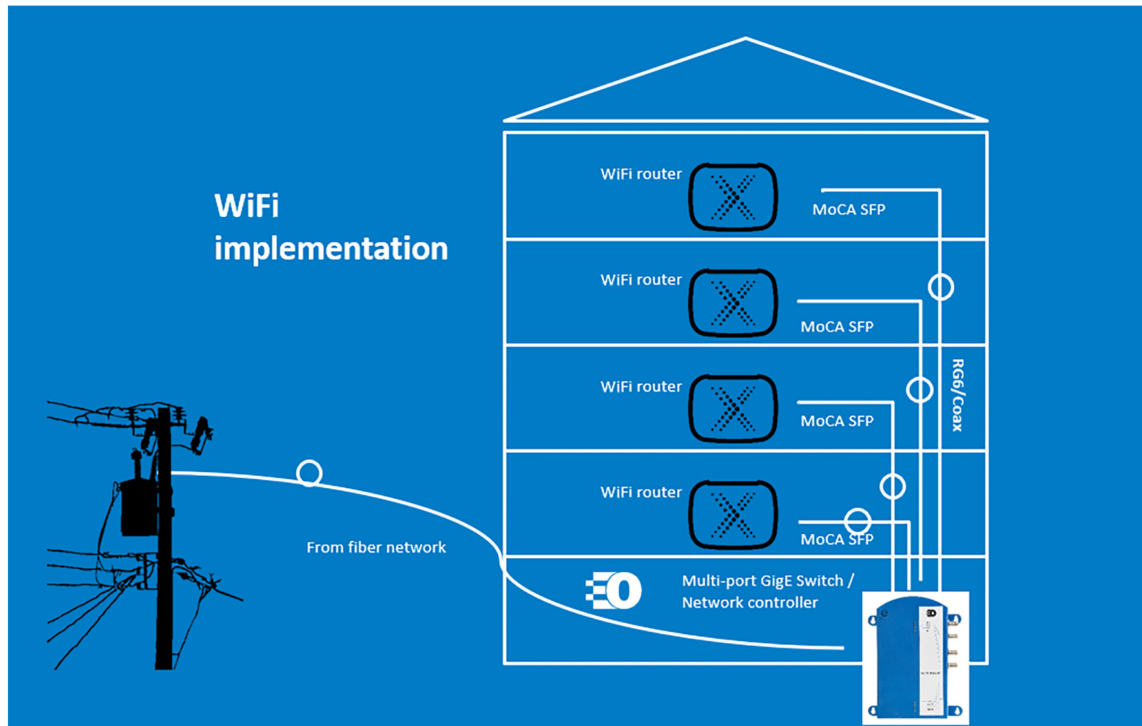
Designed specifically for MDU applications where coaxal cabling is present, the **EO** system can be implemented in a P2P or P2MP delivery design, and can be routed through the **EO** CPE device to Wireless router or WiFi mesh for reliable high speed data coverage throughout the entire premise environment, reducing truck rolls related to inferior data coverage within the home or business.

Gigabit Coax in Building System

Wired implementation

- P2P
- P2MP
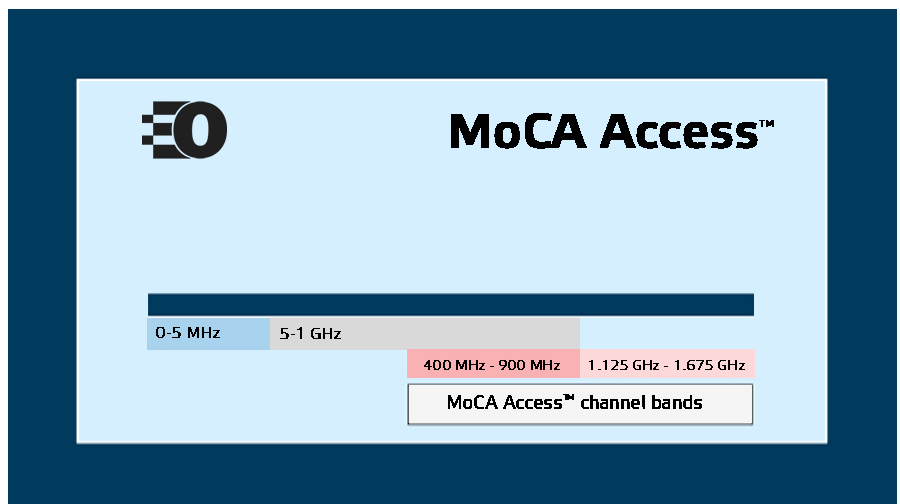- 2.5 Gbps Symmetrical TDMA
- Intuitive Cloud Management

EO can be deployed over existing coaxial premise wiring via the **EO** eMTA, and is easily implemented for rapid subscriber activation and acquisition, providing exceptional time to market and ROI for revenue generating high speed data services.

Gigabit Coax in Building System

The Intercept™ **EO** is full featured and targeted to the Multi Dwelling Unit market segment for high speed symmetrical data services in a compact and versatile design which supports up to 31 subscribers per RF port.
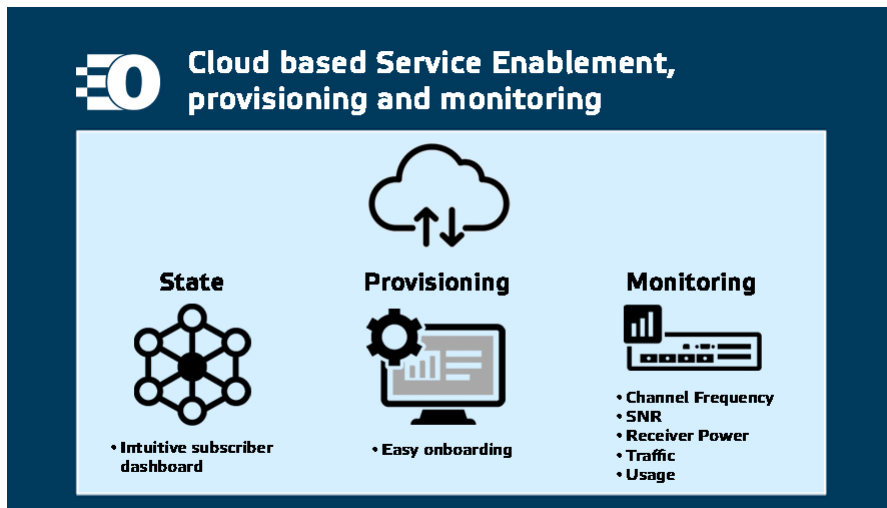
o Up to 2.5 Gbps DS and 2 Gbps US in building solution

o Uses existing coax infrastructure and cabling

o Compatible with legacy passives up to 1675 MHz

o MoCA Access transport 600 MHz – 1675 MHz

o Highly loss tolerant @ 55 dB link budget

o Intuitive cloud management tool/GUI

o Fastest time to market for Gigabit services

o Installs quickly and easily

o Fractional cost compared to FTTH

o Tailored for
   - MDU
   - Campus
   - Enterprise
   - Small Broadband systems

o Point to point or Point to Multipoint applications

o Available in 4/8 and 12 port

o Low cost and compact CPE

o MoCA SFP+ form factor

The **EO** SFP+ form factor pluggable module is highly compact and can be bandwidth enabled via EDGe series rOLT ready Ethernet switches as well as the **EO** Network controllers for versatile applications in delivering data over coax from your existing fiber network.

The **EO** solution can utilize RF spectrum between 400 MHz and 900 MHz for legacy networks which have cleared spectrum used for video services, but can also operate in a mode between 1125 MHz to 1675 MHz, leaving all legacy services in place below 1 Ghz. The **EO** uses MoCA access OFDM technology and can deliver highly efficient modulation rates up to 1024k QAM.

EO MoCA Access Frequency plan

EO SFR Product Features		
Sr. No	**Feature**	
1.	Support MoCA 2.5	Backward Interoperable with MoCA 2.0, 1.5 and 1.0
2.	Interfaces	SFI Interface Port, F-Type Connector
3.	Regulatory Approvals	FCC, CE, UL, CSA
4.	Protection	OCP, OVP and SCP
5.	Max PER	1e-6/1e-8
6.	Latency	<6.1 mS/<3 mS (LLF)
RF Specification		
Sr. No	**Specification**	**Limit/Comment**
1.	Max Transmit Power	4 dBm
2.	Receiver Sensitivity*	-55 dBm
3.	RF Interface	F-Type Connector
4.	RF Impedance	75 E
5.	RF Frequency Band	400 MHz-1675 MHz
6.	Modulation	Up to 1024 QAM
7.	Throughput	Up to 1.0 Gbps - 2.5 Gbps