

## Product and Solution Overview



## Ethernet over bonded Copper Products

The last-mile of a network presents both challenge and opportunity. By enabling service providers and network operators to fully leverage their existing copper infrastructure to deliver enhanced services alongside traditional services while reducing operating expenses, Overture Networks solutions address a key pain point within the operator's network. With Overture Networks solutions installed, network operators can increase the market opportunity for high-speed Ethernet services to business and institutional customers by ten-fold based on the current penetration of fiber optics—an attractive value proposition in any market environment. In addition to providing immediate revenue from Carrier Ethernet customers (over existing copper facilities), Overture Networks solutions are deployed for improving resiliency and delivering significantly higher bandwidth required for mission-critical business services as well as DSLAM, broadband and mobile wireless backhaul applications.

With Overture Networks' Ethernet over bonded copper solutions service providers and network operators can bond up to 32 pairs and depending on the distance, can get 15M on each pair. So theoretically you could achieve nearly 500 Mbps on copper with this solution. In practice, our customers typically deploy services and transport from 10Mbps - 100 Mbps using these solutions.

The Overture Networks Ethernet over Bonded copper portfolio includes:

### HN6100



The HN6100 is a modular, multi-service platform designed to enable carriers to offer any service, over any media, via any port or slot, from one compact, ultra-dense chassis. The HN6100 supports Ethernet over Copper customer premises equipment (CPE) via Overture Networks' HN400 Series, Ethernet over Time Division Multiplexing (TDM) and Ethernet over NxT1/E1 via the new HN500 Series and TDM over Ethernet CPE via the new HN600 Series with PWE3-plus, Overture Networks' revolutionary, patented method of simultaneously transporting native Ethernet and native TDM over copper for Mobile Backhaul solutions.

### HN4000



The HN4000 is a high density and stackable Carrier Ethernet over bonded copper aggregation solution. Supporting up to 40 copper pairs in one rack unit, multiple HN4000 units may be stacked to increase scale and resiliency. The HN4000 platform is fully compatible with the Overture Networks' HN400 series of cost-effective customer-demarkation edge devices.

## HN600



The HN600, leveraging revolutionary, patented PWE3-plus capabilities, uniquely enables simultaneous transport of native Time Division Multiplexing (DS1 and E1) and native Ethernet traffic over copper. This unit delivers 10 times more bandwidth at one-tenth the cost of legacy technologies, allowing immediate rollout of next-generation mobile broadband services.

## HN400 Series



The HN400 family of Ethernet over Copper products offer carrier-grade temperature hardened demarcation and mini-aggregation in a small low cost form factor that enables carriers and service providers to deliver service-rich business broadband services to the last-mile.

## HN239 and LPM8



Overture Networks' family of Repeaters and Line Power Modules enable a service provider or network operator to ubiquitously deploy Mid-Band Ethernet Services beyond the traditional distance limitations of copper services, reaching sites more than 25 miles (40km) from the nearest serving office.

## Optical Ethernet Products

The Overture Networks Optical Ethernet Portfolio includes:

### ISG 4800



The ISG 4800 is a modular 10 Gigabit Carrier Ethernet edge platform that enables the transition to an all-optical Ethernet network. The ISG 4800 is part of Overture's universal Ethernet services platform – now ranging from 1 Mbps to 10 Gbps – which provides a complete toolkit for service differentiation and performance assurance along with the operational efficiency offered by the family of flexible platforms.

### ISG 400



The ISG 400 Carrier Ethernet edge platform simplifies the transition from traditional TDM infrastructure to an all-optical Ethernet network. The ISG 400 is a sophisticated Carrier Ethernet edge demarcation unit with optional DS3/E3, SONET/SDH network facing interfaces. As part of Overture's universal Ethernet services platform – now ranging from 1 Mbps to 10 Gbps – the ISG 400 provides a complete toolkit for service differentiation and performance assurance along with the operational efficiency offered by the family of flexible platforms.

### UTS 4000



The UTS 4000 series delivers GigE, fast Ethernet and DS1 pseudo-wire over Carrier Ethernet infrastructure. With industry leading Ethernet OAM and flexible interface options, the UTS 4000 delivers all the capability needed for mobile backhaul, enterprise access and infrastructure applications.

### ISG 20, 24, 26



High-performance ISG 20, 24 and 26 units provide carrier-grade demarcation within metro and access networks. Designed for cellular hubs, aggregation nodes, and carrier hand-offs, the ISG 2x segments, monitors and bridges diverse networks, to deliver pervasive OAM and performance monitoring visibility.