Ethernet

Ethernet has become the go-to technology for high-performance, reliable, and cost-efficient connectivity. Healthcare providers use it to connect imaging facilities to hospitals and improve patient care, while banks rely on its ability to cost-effectively connect branches with regional headquarters.

Our Ethernet solutions combine the reliability and ubiquity of Carrier Ethernet with next-generation metro area transport technologies. The result is an efficient, fully restorable network that's easy to manage and ready for any vertical or application requirement. Additionally, the natural flexibility of Carrier Ethernet allows us to offer you a range of solutions that give you varying levels of control to meet the bandwidth and security requirements you need—today and in the future.

Our business Ethernet solutions include Metro E-Line Private Line, E-Line, Ethernet Virtual Private Line (EVPL) and Ethernet Private LAN (E-LAN). With support for Layer 2 point-to-point, point-to-multipoint and multipoint-to-multipoint topologies, you can seamlessly extend your Ethernet network from your building into the metro area and beyond. With a private, diverse fiber backbone, along with protected access options, we offer a robust solution set for your business continuity requirements. With approximately 80,000 route miles of fiber across every major metro area, you'll be tapping into one of the largest, densest Ethernet footprints in the country.

Our fully staffed Network Operations Center and locally based service teams proactively monitor your network around the clock and respond to changing circumstances, giving you unmatched reliability and peace of mind.

More than 25 Years of Expertise

NYSE
S&P 500

Our Solutions
>Towers
>Small cells
>Dark Fiber
>Ethernet
>Wavelength
>Managed SD-WAN
>Internet Access
>Private Networks
>Colocation
>Cloud Connect
>Optical Encryption
>DDoS Defense
>Cyber Defense One
>Bandwidth on Demand
>Fixed Wireless
>Ultra-Low Latency
>Video Transport

Crown Castle has taken away the pain points when it comes to bringing in new applications. We’ve been impressed with their level of customer service on every level, and have been very happy with the performance and service of our network.

GREG KLOPP
Information Technology, Hershey Entertainment & Resorts
Seamless interconnection with no additional equipment on your premises, reducing equipment capital costs. Simple installation and turn-up with no protocol conversion. Easier installation and management allows for rapid provisioning compared to other platforms. Flexible bandwidth allows you to pay as you grow. Scalability for long-term network evolution connectivity.

Our Ethernet solutions enable the extension of dedicated or virtual LAN infrastructures for WAN connectivity, with committed information rates from 10Mbps to 100Gbps and guaranteed network performance:

- **E-Line**: Dedicated UNIs for point-to-point connections—simple and secure.
- **EVPL**: A flexible, virtualized option allowing multiple applications and connections to run over a converged interface.
- **E-LAN**: Transparent LAN service and multipoint VPNs.
- **MetroE Advanced Private Line**: Private Ethernet delivered over dedicated fiber with switches deployed at each end-user location across a metro area.

Four Classes of Service provide the routing options necessary to manage traffic while ensuring application performance:

- **Mission Critical**: Ultra-high availability, superior performance, lowest latency.
- **Business Critical**: High-availability, high-performance.
- **Business Priority**: Enhanced performance.
- **Standard**: Standard performance.

### METRO-E ADVANCED PRIVATE LINE vs. E-LINE vs. EVPL, E-LAN

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>METRO-E ADVANCED PRIVATE LINE</th>
<th>E-LINE</th>
<th>EVPL, E-LAN</th>
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</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Layer 2 Ethernet over private fiber</td>
<td>Layer 2 Ethernet over DWDM or fiber</td>
<td>Layer 2 Ethernet over MPLS or fiber</td>
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<tr>
<td>Throughput</td>
<td>1Gbps - 10Gbps</td>
<td>50Mbps - 100Gbps</td>
<td>10Mbps - 10Gbps</td>
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<tr>
<td>Interface</td>
<td>GigE</td>
<td>GigE or 10 GigE</td>
<td>GigE or 10 GigE</td>
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<tr>
<td>Framing</td>
<td>Jumbo Frames up to 9100</td>
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<td>Jumbo Frames up to 9100</td>
</tr>
<tr>
<td>Network Management</td>
<td>24/7 monitoring and surveillance</td>
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<tr>
<td>Network Options</td>
<td>Metro configurations</td>
<td>Long-haul and metro configurations</td>
<td>Long-haul and metro configurations</td>
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<tr>
<td>Availability</td>
<td>Available at most on-net locations throughout the Crown Castle network</td>
<td>Available at most on-net locations throughout the Crown Castle network</td>
<td>Available at most on-net locations throughout the Crown Castle network</td>
</tr>
<tr>
<td>Architecture</td>
<td>Point-to-point</td>
<td>Point-to-point</td>
<td>Point-to-point, point-to-multipoint, multipoint-to-multipoint</td>
</tr>
</tbody>
</table>

Crown Castle owns, operates and leases more than 40,000 cell towers and approximately 80,000 route miles of fiber supporting small cells and fiber solutions across every major US market. This nationwide portfolio of communications infrastructure connects cities and communities to essential data, technology and wireless service—bringing information, ideas and innovations to the people and businesses that need them.

For more information, please contact 1-833-635-0966 or visit [CrownCastle.com](http://CrownCastle.com).