Dedicated High Capacity Services

**tw telecom**'s Dedicated High Capacity Services offer a complete range of transmission speeds from 1.5 Mbps to 10 Gbps.

Our Dedicated High Capacity Services are flexible and can be used for voice, data, image and video transmission.

We have built modern and powerful communications networks to provide business customers with the bandwidth, reliability, security and quality of service that their business demands.

Our networks are built with advanced fiber optic technology, including state-of-the-art SONET and DWDM (Dense Wave Division Multiplexing).

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**Products & Services**

**DS-1 Service:** Dedicated high-capacity, full-duplex channel with 1.544 Mbps of isochronous serial data line speed, line code of AMI (Alternate Mark Inversion) or B8ZS (Binary 8 Zeros Substitution) and either Superframe (D4) or Extended Superframe formats. DS-1 service has equivalent capacity of 24 voice grade or DS-0 services. Applications: voice, data, image or video when there is a need for cost effective, bulk communications between two locations.

**DS-3 Service:** Dedicated high-capacity, full duplex channel with 44.736 Mbps line speed of isochronous serial data, line code of B3ZS. DS-3 service has equivalent capacity of 28 DS-1 services at 1.544 Mbps, or 672 voice grade or DS-0 services at 56/64 Kbps.

High volume voice, data, image or video, eliminating the need to maintain and pay for multiple dedicated lines. DS-3 service is often used in hubbed networks as well as in point-to-point network backbone situations.

**Broadcast Video TV-1 Service:** Provides dedicated transport of broadcast quality video signals meeting NTSC analog interface standard RS250B. Available on a limited basis.

**SONET Services**

Our SONET networks automatically re-route traffic on a protected path in Sub-50 milliseconds if the transmission quality becomes degraded, a cable is cut, or a network node experiences failure. All services have carrier class network availability with Bit Error Rates = <1X10^-9.

**SONET OC-n Services:** Point-to-point, high-capacity channels for full-duplex, synchronous optical transmission of digital data on SONET standard rates between 155.52 Mbps (OC-3) and 2.488 Gbps (OC-48). OC-n services may be configured with up to 48 STS-1s in any combination of synchronous OC-3c, OC-12c and asynchronous DS-3 and DS-1 (VT1.5) payload mapping.*

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**About tw telecom**

**tw telecom** delivers the most advanced telecommunications solutions on the market to a wide spectrum of businesses and organizations across the United States. Since 1993, we have built a legacy of success through exceptional customer care, remarkable products and powerful networks. These strengths enable us to deliver scalable solutions that help customers improve their business metrics. For more information, please visit www.twtelecom.com.
**STS-1 Service:** High-capacity channel for full-duplex, synchronous, optical transmission of digital data on SONET standards. Electrical interface rate of 51.84 Mbps. Service can be configured with either asynchronous DS-3 or DS-1 mapping. Applications: high volume voice, data, image or video, eliminating the need to maintain and pay for multiple dedicated lines.

**Private Network Transport Service:** Private, dedicated high-capacity, premium quality services. Fully redundant, dedicated, diverse SONET ring is always available. Individual circuits between nodes on dedicated ring are available. Designed to deliver DS-1, DS-3, STS-1, OC-3, OC-3c, OC-12, OC-12c, OC-48 and OC-48c services between multiple locations or as a combination of end user and IXC POPs. Available in system/ring capacities of OC-3, OC-12, and OC-48. Customers can connect *tw telecom* Dedicated High Capacity Services to the PNT network node.

**DWDM Services**

For customers needing 2.5 Gigabits per second to over 1 Terabit per second, we offer point-to-point, high-capacity channels for optical transmission of digital data. Standard capacities are 2.5 Gbps or 10 Gbps on each channel (wavelength). *tw telecom*’s DWDM can be configured as protected or non-protected.

* c, as in OC-3c, is the SONET notation for concatenated service.