

# Cable Multi System Operators

Future Ready. Today



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As Cable Multi System Operators (MSO) have a large existing customer base with connectivity to their networks, they are in an advantageous position to diversify the offerings and provide various value added services such as High Speed Internet access and Video on Demand (VoD). The new-age users of digital entertainment demand superior quality of contents at reasonable price. Moreover as new formats & technologies are introduced (High Definition TV for example), the traditional backhaul mechanism will prove inadequate as these requires optimum scalability & bandwidth allocation.

Tejas provides state of the art solutions for Cable MSO network based on Ethernet over SDH/SONET or pure packet switching networks.

### Tejas benefits in MSO Networks:

- End to end portfolio - Tejas have a comprehensive SDH/SONET (STM-1/OC-3 to STM-64/OC-192), Packet Switching (8Gbps to 240Gbps), WDM (up to 80 channels) and NMS solutions. These products are compact, power efficient and with intelligent features to enable easy management. They provide a large number of interface/ traffic module options and equipment redundancy.
- Drop-and-continue for Video Broadcast - In case of video broadcast, this results in lesser bandwidth usage in the Cable MSO network as instead separate copies of signal to each hub, the super-hub can send just one copy.
- IGMP Snooping for Digital Switched Video and IP-TV - Tejas platforms support multicasting capabilities allowing a large number of channels. In case of dynamic multicast, IGMP snooping feature reduces bandwidth requirements & channel switching time at the same time.
- Scalable Ethernet Aggregation for Broadband Aggregation - Statistical Multiplexing in Tejas equipments reduces Metro Bandwidth usage, and reduces number of ports required on Gateway Routers thus leading to significant cost savings. Tejas supports advanced MAC-in-MAC, Q-in-Q for superior scalable networks.
- Quality of Service and Ethernet OAM for Enterprise Cable Services - Tejas' nodes implements an advanced, three-level HQoS engine that allows fine-grained differentiation and shaping of transport tunnels, customer services and sub-services over the transport layer. It enables requirement based service provisioning viz., attach higher priority and preferential packet forwarding treatment to premium services and establish tiered SLAs. Moreover, Ethernet OAM allows you performance monitoring and fault detection & rectification in an efficient manner.
- Carrier grade VoIP service - Tejas solutions allow Layer-3 and Layer-4 inspection for separating VoIP traffic from Internet traffic and thus provide them a higher priority to minimize packet loss and give a better quality of the voice service.
- Sub 50-ms protection - Tejas nodes ensure a sub 50ms protection mechanism not only in its SDH/SONET platforms but also in its packet switching platform - based on ERPS (ITU G.8032)
- Tejas nodes support for Jumbo frames to ensure efficient transmission of video over optical network.



Figure: Tejas Platforms in Cable MSO networks

In essence, Tejas future-ready solutions ensure your customer satisfaction from reliable content delivery as well as opens up new revenue generating opportunities.

TEJAS SOLUTIONS