IPITEK
INTEGRATED PHOTONICS TECHNOLOGY
ISO 9001 Registered

MSP-300

Multi-Service Aggregation Video Platform

Benefits and Features

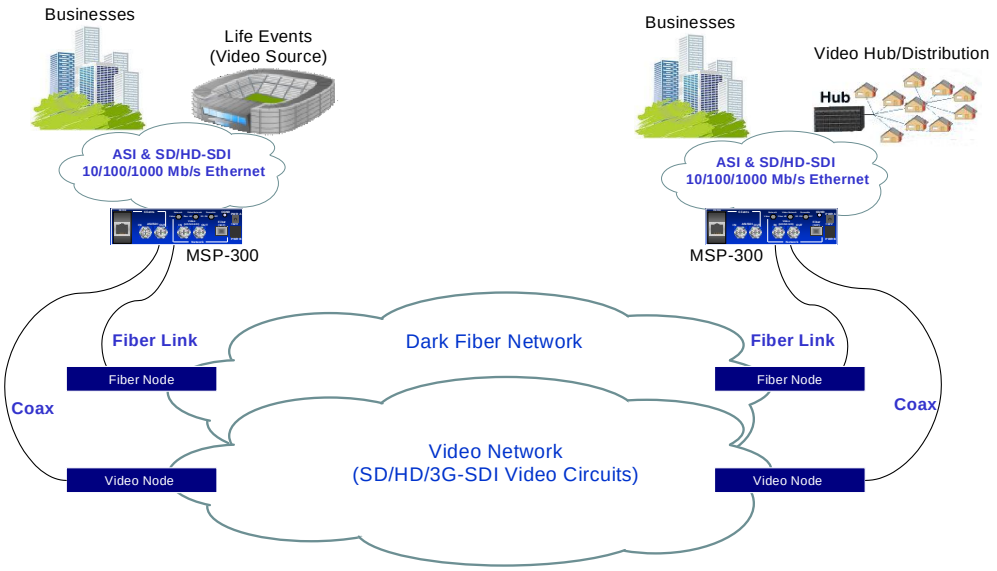
- **Service optimization over leased 1.485 Gb/s HD-SDI, 2.970 Gb/s 3G-SDI, and 270Mb/s SD-SDI video circuits or Dark Fiber by collecting and aggregating lower speed data and video service from user premises/venues/studios**
- **Optimized solution for providing both video (ASI, SD/HD/3G-SDI) and Ethernet that ranges 10/100/1000 Mb/s over Video or Fiber circuits**
- **No changes needed as customers upgrade from 270 Mb/s SD-SDI to 1.486 Gb/s HD-SDI and even to 2.97 Gb/s 3G-SDI video circuits**
- **Easy-to-use and plug-and-play platform with system LEDs and selection switches.**

.

Description

IPITEK's MSP-300 is a new addition to the existing video transport family. This multiplexer/aggregator platform further optimizes network resources. MSP-300 is a network access and aggregation device that can collect both client data traffic and video circuits. Users of the MSP-300 can optimize their regional/national SD/HD/3G-SDI circuits by utilizing their capacities in carrying lower speed video services such as ASI, SD, HD, 3G video and 10 to 1000 Mbit/s Ethernet services (Table 1 below).

MSP-300 is future proof product: it is ready to support 3G-SDI video transport circuits. It is also a dual-purpose video transport system. The MSP-300 can carry video/Ethernet services over video circuits or dark fiber links or video coax networks. This allows the customer to use the system for support services of mixed-types of transport networks. The mode of operation (i.e., video vs. dark fiber network) can be easily selected with simple selection switches. To facilitate control and simplify the provisioning of the unit, MSP-300 provides user selection switches and/or buttons that can be used to determine the supported services. The system also features several LEDs that display the system status as well as monitor services type/status.



Example Application: IPITEK MSP-300 is used for collecting and aggregating data and video services from local access loops. Data services include 10/100/1000 Mb/s Ethernet and video services include ASI, SD, and HD-SDI. Such services can be carried over Dark Fiber or video circuits at 1.485 Gb/s (HD), 2.97 Gb/s (3G) or 270 Mb/s (SD) for optimized bandwidth and video transport service utilization.

IPITEK HD Video and Ethernet Access Platform

Network Interfaces

Video Interfaces: 1x Bidirectional BNC Connectors for SDI circuits at 270 Mb/s SD (SMPTE 259M), 1.485 Gb/s HD (SMPTE 292M), 2.970 Gb/s 3G (SMPTE 424M).

Fiber Interfaces: 1x Fiber Interface (SFP) for Connecting to 1310/1550nm/CWDM/DWDM Dark Fiber Networks or SMPTE standard Video Network.

Client Service/Interfaces

Ethernet Services: 1x FE/GE Ethernet Port (RJ45)

Video Services: 1x Bidirectional BNC Connectors at ASI, SD-SDI (SMPTE 259M), HD-SDI (SMPTE 292M), and 3G-SDI (SMPTE 424M).

Environmental

Operating temperature: 0° to 50°C
Storage temperature: -10° to +75°C
Relative humidity: 10 to 90%

Power
Dual power inputs, +12 VDC

Physical
1.75 " high x 5.5" wide x 10" deep

Provisioning and Monitoring

Local control of unit operation mode and service monitoring using by easy-to-use selection switches and status display using LEDs.

Table 1: List of services provided by the MSP-300 for a given video trunk speed

2.970G 3G-SDI Network Circuit (Coax or Fiber)

Client Services Options:

1. 1.5G HD (SMPTE 292) video circuit + Ethernet circuit (10/100/1000 Mb/s) multiplexing
2. 270 Mb/s (SMPTE 259) video circuit + Ethernet circuit (10/100/1000 Mb/s) multiplexing
3. DVB-ASI (up to 270 Mb/s) video circuit + Ethernet circuit (10/100/1000 Mb/s) multiplexing
4. 3.0G HD video circuit signal relocking (if trunk is Coax)
5. 3.0G HD video circuit transmission media conversion (if trunk is Fiber)

1.485G HD-SDI Network Circuit (Coax or Fiber)

Client Services Options:

1. 270 Mb/s (SMPTE 259) video circuit + Ethernet circuit (10/100/1000 Mb/s) multiplexing
2. DVB-ASI (up to 270 Mb/s) video circuit + Ethernet circuit (10/100/1000 Mb/s) multiplexing
3. 1.5G HD video circuit signal relocking (if trunk is Coax)
4. 1.5G HD video circuit transmission media conversion (if trunk is Fiber)

270M SD-SDI Network Circuit (Coax or Fiber)

Client Services Options:

1. ASI (up to 149 Mb/s) video circuit + Ethernet circuit (10/100 Mb/s) multiplexing
2. 270 Mb/s (SMPTE 259) video transmission media conversion (if trunk is Fiber)
3. 270 Mb/s (SMPTE 259) video circuit signal relocking (if trunk is Coax)
4. DVB-ASI (up to 149 Mb/s) video circuit over Coax or Fiber

IPITEK
2330 Faraday Avenue • Carlsbad • CA • 92008
(760) 438-1010 • Toll Free (888) 4-IPITEK (447-4835) • FAX (760) 438-2412 • sales@ipitek.com • www.ipitek.com