

## MSP-300: Carrying Ethernet over SDI

There is no doubt that broadcasters require private data services in addition to their SDI video circuits. Typically in the form of Ethernet, broadcasters establish data services by leasing costly Ethernet connections. Realizing this urgent demand, IPITEK has devised an innovative way for allowing customers to leverage their video services; that is, to squeeze Ethernet services from their SDI video circuits at no additional cost. Therefore, IPITEK has developed Ethernet and video multiplexing solution, the MSP-300, which transports Ethernet over SDI video circuits.

IPITEK's MSP-300 is a multiplexer platform that optimizes network resources by collecting both Ethernet and video circuits and multiplexes them for transport over leased SDI (SD/HD/3G-SDI) circuits as shown in Figure 1.



Figure 1: Carrying Ethernet over SDI Using MSP-300

The MSP-300 supports the transmission of two-way video trunks. Each video trunk carries a separate video signal. This feature allows broadcasters and carriers to support two-way transmission of video services using only one small platform, and thus, cut capital expenditure by half.

The flexibility of the MSP-300 does not stop at support Ethernet and video services over coax or fiber video networks. In addition to these features, the MSP-300 does not require the input/output video trunk ports or input/output video client ports to operate at the same video rate. In fact, customers can have differential video rates on different video ports. For example, it is possible that the one of the video circuits operate at HD-SDI while the opposite direction operates at 3G-SDI or SD-SDI.

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.