

ARCHITECTS & ENGINEERS SPECIFICATION for the DD32E unit

The optical, digital I/O network module shall be part of a synchronous fiber optical network. It shall provide four principal ports for connection and transport of a total of 32 AES/EBU digital audio channels i.e. 64 mono channels. These channels shall be user defined as input or output in groups of four (32 - 0, 28 - 4, 24 - 8, ... , 4 - 28, 0 - 32). Four RS485 interfaces shall exchange control data such as RS422, RS485, DMX and MIDI. Audio, video and data signals shall be transmitted via optical fiber. The device shall include bidirectional composite video and word clock interfaces. The module shall offer word clock input and output. Redundant power supply and safeguards against malfunctions shall be provided through a dual power supply unit with automatic switchover. The digital I/O device shall include two optical 1 Gbps LINK interfaces with duplex SC-connectors, offering redundancy and providing maximum safety with an extreme low latency of 41.6µs. Configuration and control shall be possible using the USB and RS232 ports. Control software shall operate on a PC, offering full remote access and upgradeable internal logic. LED banks on the front of the device shall provide comprehensive status control. The module shall be compliant with the CE conformity and shall be used in E1, E2, E3, E4, or E5 environments according to the harmonized European standards EN55103-1 and EN55103-2.

The optical, digital I/O network module shall be the Optocore® DD32E unit.