ARCHITECTS & ENGINEERS SPECIFICATION for the DD4MR-FX unit

The optical, digital I/O network unit and interface shall be part of a synchronous fiber optical network. It shall provide two MADI input and two MADI output ports. The MADI ports shall be equipped with coaxial interfaces. The ports shall allow the transmission of up to 128 input and 128 output digital audio channels. According to AES standards, each MADI port shall be adjustable in order to handle different formats. Four RS485 interfaces shall exchange control data such as RS422, RS485, DMX and MIDI. In addition 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 1/2 Gbps SFP LINK interfaces with duplex LC-connectors, offering redundancy and providing maximum safety with a latency below 425µs. Additionally device shall be equipped with two LAN ports and two Synchronous Audio Network ports with Ethernet. Configuration and control shall be possible using the USB, LAN or 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/FCC 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 device shall be compliant with EN60065 - Safety requirements.

The optical, digital I/O network module shall be the Optocore® DD4MR-FX unit.