

## **ARCHITECTS & ENGINEERS SPECIFICATION for the V3R-FX unit**

The device shall be an 8-channel converter unit to transform analog signals to digital or digital to analog and be part of synchronous fibre optical network. It shall be equipped with one audio board with phoenix connectors enabling connection for eight balanced signals. The board might be chosen from the range of microphone inputs, line inputs, line outputs. The device shall function in applications where the A/D or D/A conversion is needed. The microphone inputs shall include high quality pre-amp, phantom power and selectable gains in 1 dB steps from 0 dB to +70 dB, line inputs shall include gains adjustment from the -9 dB, -4 dB, 0 dB or +10dB fixed values. The outputs shall include the adjustment of the channel level in four steps: +4 dBFS, 0 dBFS, -4 dBFS -10 dBFS. Four RS485 interfaces shall exchange control data such as RS422, RS485, DMX and MIDI. 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 42µs. 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® V3R-FX unit.