

## **ARCHITECTS & ENGINEERS SPECIFICATION for the DD8RP unit**

The optical, digital I/O repeater, media converter module shall be part of a synchronous fiber optical network. The unit shall provide two possible applications. It shall operate as a repeater in the network, if distances between devices are longer than 700 m and the standard multimode fiber cables are used. Alternatively, it shall function as media converter from multimode to monomode fiber connections and vice versa. The device shall offer four independent LINK interfaces with receptacles for SFPs. The SFPs shall provide multimode or monomode dual LC-type connectors. The four repeaters / media converters shall work protocol independent; they shall be implemented in networks based on protocols such as Ethernet. The unit shall be provide a DC 12 V power inlet. Battery packs shall supply the power, if no mains supply is available. It shall simplify outdoor applications. In addition the unit shall provide a 400 V tolerant AC power supply. The digital I/O device shall offer redundancy, provide maximum safety with an extreme low latency of 41.6 $\mu$ s. 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® DD8RP unit.