DATA SHEET

PTP32E

POINT-TO-POINT SYSTEM

OPTICAL DIGITAL NETWORK DEVICE

Product Features

- **32 AES/EBU digital audio channels i.e. 64 mono channels**
- **Unique possibility to use them as AES/EBU inputs or outputs.**
- **4 RS485 interfaces for the exchange of control data. (e.g. RS422, RS485, DMX, MIDI)**
- **Word clock in- and output**
- **Composite video in- and output**
- **2 optical 1 Gbps LINK interface with duplex SC-connectors**
- **Dual power supply with automatic switchover**
- **1 USB and 1 RS232 port for configuration and control**
- **Full remote access with OPTOCORE CONTROL software**
- **Upgradeable internal logic**
- **Comprehensive status control via LED banks on the front**

The PTP32E is the point-to-point version of its "network brother" DD32E. Using a pair of PTP32E devices is probably the easiest and cost effective way to connect STAGE with FOH.

The PTP32E offers 4 principal ports for connection and transport of a total of 32 AES/EBU digital audio channels i.e. 64 mono channels These channels are user defined as input or output in groups of four (32 - 0, 28 - 4, 24 - 8, … , 4 - 28, 0 - 32).

Using two PTP32Es can easily replace an analog multi-conductor cable, weighting only a fraction of a conventional copper cored one. It is the first step when changing from analog to digital equipment.

In combination with one PTP32E, all the other OPTOCORE devices such as DD32, LX4AP, the interface card YG2 for Yamaha devices, etc. can operate on the other side of the point-to-point fiber optic connection. The PTP32E enables the gain control of OPTOCORE microphone preamps on stage from a digital console at FOH.

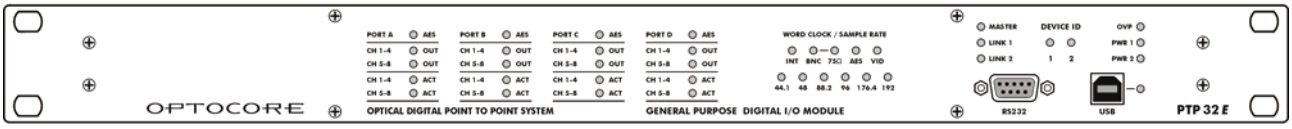
This offers an incredible broad flexibility. The PTP32E can be used in all sorts of temporary and permanent applications, especially when long distance connections, high-quality audio transmission or high security is required. Depending on the fiber optic transceivers, distances from 700 m up to 70 km can be covered.

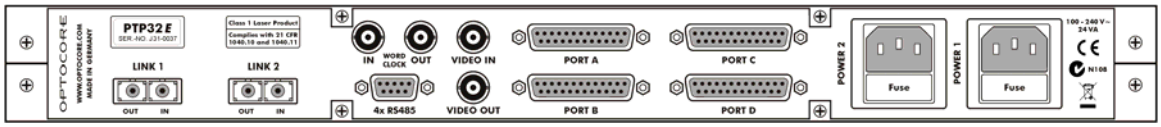
The PTP32E also includes bi-directional composite video and word clock interfaces. Four RS485 ports allow the transport of a wide range of standards such as RS422, DMX and MIDI. In addition to the audio signals, the video and data signals are transmitted by the fiber connection. The dual power supply unit, with automatic switchover, permits a redundant power supply and safeguards against malfunctions of the unit if one power supply fails to run.

Two PTP32E devices can be purchased with a factory setting appropriate for the respective application, the system is then ready for use. Settings can be altered using OPTOCORE CONTROL. OPTOCORE CONTROL provides easy access to all configuration and control tools.

Due to SMD, production the PTP32E fulfills the demand of highest digital standards occupying only one rack unit of a 19" rack. The FPGA (field programmable gate array) based concept of the internal logic circuitry permits updating of the hardware by the use of the units remote ports, ensuring a continual state-of-the-art device.

Line Drawings





Technical Specifications

Principal Ports	Convention EIA / TIA-422	
Data channels	Digital data, AES/EBU	32
	AES/EBU audio channels	64
Impedance	Termination	330 Ω
	Source	≤ 10 Ω
Auxiliary Ports	Convention EIA / TIA-485	
Data channels	Digital control data	4
Impedance	Termination	330 Ω
	Source	≤ 10 Ω
Word Clock	Hardware standard 75 Ω / BNC	
Sample rate		44,1 / 48 / 88,2 / 96 / 176,4 / 192 kHz
Impedance	Output	75 Ω
	Input	1k / 75 Ω software switch
Video	Hardware standard 75 Ω / BNC	
Channels		1 x input, 1 x output
Format		Composite video
Link	Input, Output, Dual – Full bandwidth	
Connection		Duplex SC
Protocol		Optocore
Transmission		Full duplex
Data rate		2 x 1 Gbps
Optical wave guide cable lengths	Multimode fiber 50 µm	≤ 700 m
	Monomode fiber 9 µm	≤ 70 km (on request)
Power Supply	2 independent power supplies with function check and automatic switch-over	
Type	Switch-mode, universal input	
Mains voltage	100 ... 240 V, 400 V_{AC} tolerant	
Frequency	50 ... 60 Hz	
Remote Control		
RS232	Convention EIA / TIA-232	R x D, T x D / 57 600 Baud
USB Port		Interface to PC
Dimensions		1 RU / 19”
W x H x D	483 x 44 x 136 mm	19.2 x 1.73 x 5,35 inch
Weight	2.3 kg	5.1 lbs