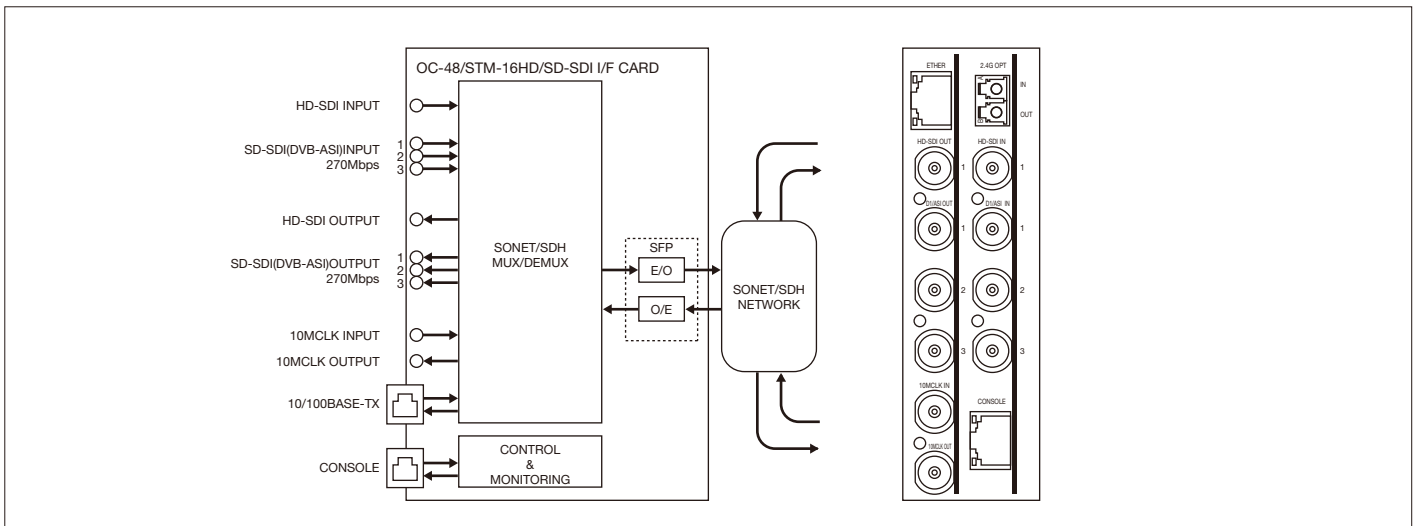# OC-2500 Series

Empowered by Innovation

NEC

HD/SD3-OC48 Transceiver Card

HD/SD3-OC48 Transceiver Card transmit 1ch HDTV and 3ch, SDTV (D1) DVB-ASI signal (270Mbps) over OC-48(STM-16) optical signal. This realizes long distance transmission by optical fiber cable.

Features

Realize Long distance and high quality video signal transmission over OC-48/STM-16

Multi converts from HD-SDI, SD-SDI(D1) or DVB-ASI to OC-48/STM-16(2.5Gbps) optical signal.

Multiplex transmission of HD-SDI×1ch+SD-SDI×3ch is available.

Possible to select distance length of optical fiber by SFP optical transceiver module

Maximum distance length is 160 k m(when selecting DWDM).

It is possible to support LR2(80km), LR1(60km), SR(3km) according to the usage.

10M/100M Ethernet

Provides 10M/100M Ethernet transmission.

10M CLK

Provides 10M CLK transmission.

Remote controlling and maintenance function

Remote controlling and monitoring by SNMP and Web browser is available.

Power supply in a redundant system

Since power supply can be configured as a redundant system, high reliable operation will be possible.

Hot-swappable plug in is available

Each module, power supply can be replaced with the power on for better maintainability.
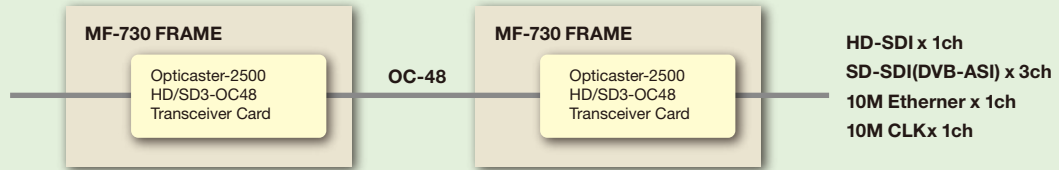
Flexible Card Installation

Video A/D, D/A, AV-MPX/DMPX and other converter cards can be installed in same MF-730/OPT common frame.

NEC Corporation
http://www.nec.com/global/prod/nw/broadcast/

Application

Example:
- HD-SDI x 1ch
- SD-SDI(DVB-ASI) x 3ch
- 10M Etherner x 1ch
- 10M CLKx 1ch

| MF-730 FRAME |
| Opticaster-2500 HD/SD3-OC48 Transceiver Card |

OC-48

| MF-730 FRAME |
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- HD-SDI x 1ch
- SD-SDI(DVB-ASI) x 3ch
- 10M Etherner x 1ch
- 10M CLKx 1ch

OC-48 Interface Specification

	SR	LR1	LR2/CWDM	LR2H/DWDM
Transmission Distance	3 km*1	60 km*1	80 km*2	160 km*2
Wavelength (nm)	1310nm	1310 nm	1550nm	1527.22 to 1563.86nm
Output Level	-10 to -3 dBm	-2 to +3 dBm	-2 to +3 dBm	+3 to +7 dBm
Input Level	-18 to -3 dBm	-27 to -9 dBm	-28 to -9 dBm	-28 to -9 dBm
Connecter Type	LC Connector			
Fiber Type	SM/MM Type Optical Fiber Cable (SI 10/GI 50/GI 62.5/125μm)			

*1 Transmission distance is calculated on assumption that Optical fiber loss as 0.4dB/km and optical fiber dispersion as 20ps/nm/km. It might be change according to optical fiber.
*2 Transmission distance is calculated on assumption that Optical fiber loss as 0.25dB/km and optical fiber dispersion as 20ps/nm/km. It might be change according to optical fiber.

HD-SDI Interface Specification

Bit Rate	1.485/1.001Gbps ±10ppm or 1.485Gbps ±10ppm*1
Connecter Type	BNC Connecter(75Ω unbalance type)
Output signal amplitude	800mVPP ±10%
Others	SMPTE 292M Compliance

SD-SDI Interface Specification

Bit Rate	270Mbps±10ppm(D1) 270Mbps±100ppm(DVB-ASI)
Connecter Type	BNC Connecter(75Ω unbalance type)
Output signal amplitude	800mVPP ±10%
Others	SMPTE 259M Compliance/DVB DOCUMENT A010 Compliance
10M Ethernet	10/100BASE-TX(Actual through put : below 10Mbit/s)

Ordering Information

OC-2500-①H1S3-②EC-OC48-③TR-④(LR1)

①**HD/SD No. of Channel : 'H1S3' : HD 1Ch + SD 3Ch / 'H0S8' : SD 8Ch**
②**ETHER & 10M CLK transmission function 'EC' : EHTER,with 10MCLK / '00' : none**
③**TR: Transmit/Receive   : 'T' : Transmit / 'R' : Receive**
④**Transceiver Type**

Mounting Frame

Frame Type	MF730 Multi-Functional Frame	MF712 Multi-Functional Frame
	Rack mount type (3RU ,14slots)	Rack mount type (1RU,3slots)
Dimensions	480 (W) x 132 (H) x 500 (D) mm	480 (W) x 44 (H) x 500 (D) mm
Weight	9kg (frame only)	5kg (frame only)
Power supply	85 to 264V AC (Single phase)	85 to 264V AC (Single phase)
Power Consumption	350VA (Max. Load）	130VA (Max. Load）
Operation Temperature	0°C to 40°C	0°C to 40°C

⚠ **Safety precautions**   To install, make connections and operate this product, please carefully read and observe instructions, precautions and recommendations in our instruction manuals.

● The colours in this brochure may differ from those of the actual unit. Designs and specifications of this product is subject to change without prior notice.

Cat.No. H01-10030025E2