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 km (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.

[Diagram of HD/SD3-OC48 Transceiver Card]

NEC Corporation
http://www.nec.com/global/prod/nw/broadcast/
HD/SD3-OC48 Transceiver Card

### Application

**Example:**

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

### OC-48 Interface Specification

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

*1 Transmission distance is calculated on assumption that Optical fiber loss is 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 is 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
- Connector 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)
- Connector Type: BNC Connecter(75Ω unbalance type)
- Output signal amplitude: 800mVpp ±10%
- Others: SMPTE 259M Compliance/DVB DOCUMENT A010 Compliance

### 10M Ethernet

- Bit Rate: 10/100BASE-TX(Actual through put : below 10Mbit/s)
- Connector Type: BNC Connecter(75Ω unbalance type)
- Output signal amplitude: 800mVpp ±10%
- Others: SMPTE 292M Compliance

### Ordering Information

**OC-2500-1H1S3-2EC-OC48-3TR-4(LR1)**

1. HD/SD No. of Channel : 'H1S3' : HD 1Ch + SD 3Ch / 'HOS8' : SD 8Ch
2. ETHER & 10M CLK transmission function 'EC' : ENTER,with 10MCLK / '00' : none
3. TR: Transmit/Receive : 'T' : Transmit / 'R' : Receive
4. Transceiver Type

### Mounting Frame

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

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

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