# OPTICIS

# *32x32 DVI/HDMI/SDI/DisplayPort Multi-Format Modular Matrix,*
# **OMM-2500**

## Description

OMM-2500 enables you to switch up to 32 DVI /HDMI /SDI / DisplayPort inputs to 32 digital displays by using general PC software like Hyperlink terminal, telnet or web browser. Easy programming feature is accomplished in various manners such as manual input of front key or command line (ASCII or Binary code) input with various interfaces of RS-232, and TCP/IP and it offers you flexible installation with other video controllers or control software. The input and output cards are composed of 4 ports, therefore user can configures any input and output channels from 4X4 to 32X32 by plugging the cards into OMM-2500 mainframe. In case of Dual link DVI card (DDVI-2EI / DDVI-2EO), it is composed of 2 ports, therefore configuration for input and output channels are from 2x2 to 16x16. It equips electrical DVI, HDMI, SDI, DisplayPort, and optical DVI (SDVI-1FI/SDVI-1FO) input and output cards. Optical DVI input and output cards works perfectly with OPTICIS 1 fiber DVI extension module, DVFX-100 and maximum 1Km DVI signal extension can be managed with this combination. It also supports wide-range compatibility with respect to systems, consisting of various sources and various digital monitors. It has been designed not only to fully execute the DDC (Display Data Channel)/HDCP (High-bandwidth Digital Content Protection) function (Electrical DVI and HDMI cards only), but also to have users designate EDID to inputs for wide compatibility. Embedded video signal generator and diagnostic function help the user solve the installation problem with easy and optional quad multi-viewer card saves the installation cost.

## Specification

- Configurable up to 32 x 32 electrical and optical input/output.
  - Minimum configuration is 4 x 4.
  - Supports HDMI / SDI /DL DVI / DisplayPort input and output as an option.
  - Dual link DVI supports from 2 x 2 to 16 x16 input / output.
- Provides Touch LCD and a user-friendly graphic interface.
- Supports DDC/HDCP (Electrical DVI and HDMI cards only).
- Supports DPCP. (Electrical DisplayPort card only).
- Provides various control methods (RS-232, TCP/IP, WEB, Key input)
- Equips multi-viewer function (QDVI-O).
- Provides Diagnostic function for quick trouble shooting.
- Has Reference video output and monitoring output for easy installation.
- Handles DVI signal up to 1Km over Multi-mode fiber with fiber optic cards, SDVI-1FI, SDVI-1FO.
- Offers EDID management function.
  - Default Mode
  - Auto Detect Mode
  - Output Copy Mode
  - Resolution List Mode
- Provides Preset mode to save and load the current routings.
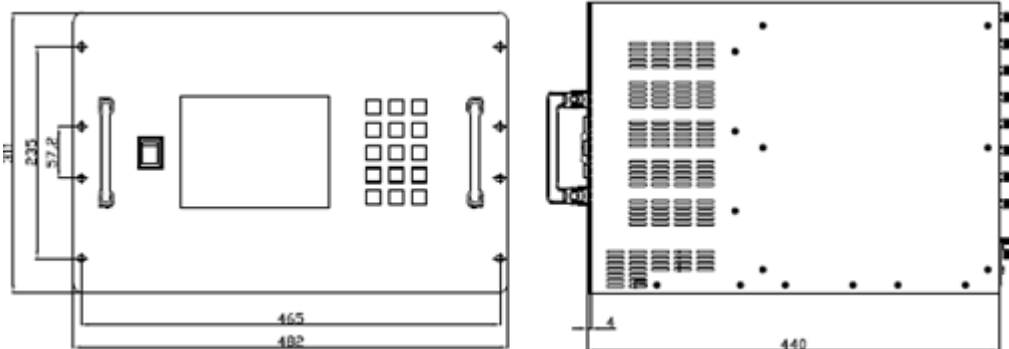- Certifications: CE / FCC.

## Applications

- Medical imaging system
- Video wall system
- Digital signage
- Military / Aerospace

## Technical Features

| Section | Basic Spec. | Section | Basic Spec. |
|---|---|---|---|
| Video resolution | Main VESA resolution & Main vertical frequency from 640x480 up to WUXGA (1920x1200), @60Hz WQXGA (2560x1600),@60Hz (Dual link , DisplayPort card only) | Reference video output | 9 output video resolutions with 16 patterns |
| HDCP | Support : Electric DVI, Dual link DVI, HDMI Non-support : Optical DVI, SDI, DisplayPort | Diagnosis | 1) In/Output Link condition 2) source & display Link condition 3) EDID, HDCP information by the remote control through the Web |
| Video format conversion | Video format conversion without scaling function | Configuration | Save & Restore for Current connection & Control condition by internal memory |
| Multi -viewer | With additional output card (QDVI-O), Quad view & picture in picture (PIP) | EDID management | 1) Default Mode 2) Auto Detect Mode 3) Output Copy Mode 4) Resolution List Mode |
| In/Output | 32 x 32 (4 ports in one in/output card) 16 x 16 (2 ports in one in/output card) | Color | Black |
| Switching speed | < 1 sec (If No format searching by Display) | Touch LCD | Pressure type |
| Size | 440 x 440 x 311mm (WDH),　(7U, 19") | Section | |
| | | Single DVI input | SDVI-4EI | 4 x DVI-D receptacle |
| | | Single DVI output | SDVI-4EO | 4 x DVI-D receptacle |
| Weight | < 15Kg　(net weight for single power) | Dual DVI input | DDVI-2EI | 2 x DVI-D receptacle |
| | | Dual DVI output | DDVI-2EO | 2 x DVI-D receptacle |
| | | HDMI input | HDMI-4EI | 4 x HDMI receptacle |
| | | HDMI output | HDMI-4EO | 4 x HDMI receptacle |
| Cooling system | Cooling fan (Forced cooling system) | SDI input | SDI-4EI | 4 x SDI receptacle |
| | | SDI output | SDI -4EO | 4 x SDI receptacle |
| Certificate | CE / FCC | DisplayPort input | DP1-4EI | 4 x DP receptacle |
| | | DisplayPort output | DP1-4EO | 4 x DP receptacle |
| | | Quad output | QDVI-O | 1x DVI-D receptacle + 1x SC receptacle |
| | | 1 fiber DVI input | SDVI-1FI | 4 x SC receptacle |
| Control system | Front-key, RS-232, TCP/IP, Web | 1fiber DVI output | SDVI-1FO | 4 x SC receptacle |
| | | Transport & Storage condition | Temperature (℃) | -30 ~ +70 |

| | Operating condition | | Transport & Storage condition | | |
|---|---|---|---|---|---|
| Operating condition | Temperature (℃) | 10 ~ 40 | Relative humidity (%) Atmospheric Pressure (hPa) Temperature (℃) | Relative humidity (%) | +10 ~ +95 |
| | Relative humidity (%) | +30~ +75 | | Atmospheric Pressure (hPa) | 500~1060 |
| | Atmospheric Pressure (hPa) | 700~1060 | | | |

## Dimension

*All contents are subject to be changed without prior notice.*