



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: MX-FR33L

FUNCTIONAL OVERVIEW

Lightware's hybrid modular matrix routers allow building custom I/O sizes that meet the user's requirements. Different types of input and output boards give the maximum flexibility for rental and installation signal transmission. The hybrid architecture allows signal routing between boards even if they have different connectors. This way any input can be routed to any one or more outputs if the output interface is capable of transmitting the signal.

I/O BOARD SPECIFICATION

- Max. input boards: 4
- Max. input ports: 33
- Max. output boards: 4
- Max. output ports: 33
- The maximum number of input and output ports includes the Test input and Preview output port of the MX-CPU2 processor board.

POWERING

- Power supply option: Built-in PSU
- Supported power source: 115-230 V AC; 50/60 Hz
- AC power connector: IEC C14 receptacle
- AC fuse: F 6.3 A L
- A 2-pole Phoenix connector is used for 12V DC input for TP and TPS boards and 48V for TPS2 boards.

CONTROL

- Front panel control with source/destination buttons and LCD menu-based configuration.
- MX-CPU2 control board is required to control the matrix frame
- Lightware Device Controller (LDC) software (Windows and macOS).
- Built-in website (web browser control/configuration).

- Ethernet control with multiple simultaneous TCP/IP connections using simple ASCII-based protocol.
- USB control via front panel USB configuration port.
- RS-232 or RS-422 control using simple ASCII-based protocol.

GENERAL

- Rack mount: Yes, 6U high
- Enclosure material: 1 mm steel
- Dimensions in mm: W482 x D300 x H265
- Dimensions in inch: W19.0 x D15.7 x H10.4
- The front rack ears allow to mount the device as a standard rack unit installation.
- Frame type: 2x6 pcs. mounting holes
- Compliance: CE, UKCA
- Electrical safety: EN 60065:2002 + A1:2006 + A11:2008 + A2:2010 + A12:2011
- Safety / electrical class: Class I apparatus construction (protective earth required).
- Warranty: 3 years
- Cooling: by cooling fans
- Supplied accessories:
 - IEC power cable
 - RS-232 straight serial cable
 - Safety and Warranty Info; Quick Start Guide
- Cooling / ventilation requirement: ensure enough free space around the appliance; do not cover the appliance; leave ventilation holes free; never block or bypass ventilators (if any).

DOCUMENT REVISION HISTORY

Document	Release Date	Changes	Checked by
v1	2026-08-19	Initial version	Tamas Forgacs