



ARCHITECTURAL AND ENGINEERING SPECIFICATION

PRODUCT: MX-FR80R

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 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. The router allows any input to be switched to any output or more outputs simultaneously.

I/O BOARD SPECIFICATION

- Rack height: 15U
- Max. input boards: 10
- Max. input ports: 80
- Max. output boards: 10
- Max. output ports: 80
- INFO: 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: Swappable PSU
- Supported power source: 100-240 V AC; 50/60 Hz
- Power supply unit(s) type: MX-PSU-1300 (former type: MX-PSU-850)
- Power consumption (max): 1500 W
- Heat dissipation: 6830 BTU/h
- AC power connector: IEC C14 receptacle

CONTROL

- Front Panel Control
- Lightware Device Controller (LDC)
- Built-in Website



- Ethernet Control (multiple simultaneous TCP/IP connections; simple ASCII based protocol)
- USB Control (front panel USB configuration port)
- RS-232 or RS-422 Control (simple ASCII-based protocol can be used for switching, preset calling, status request, etc.)

GENERAL

- Rack mount: Yes, 15U high
- Enclosure material: 1 mm steel
- Dimensions in mm: W482 x D393 x H665
- Dimensions in inch: W19.0 x D15.5 x H26.2
- Weight of the frame (with MX-CPU2 board): 27.6 kg (60.8 lbs)
- Weight of the MX-PSU-850: 1.4 kg (3.1 lbs)
- Rack mounting: standard rack unit installation using supplied rack mounting ears (fixed to the frame).
- MX-FR80R mounting holes: 2x6 pcs.
- Supplied accessories:
 - IEC power cable
 - RS-232 straight serial cable
 - Safety and Warranty Info; Quick Start Guide
- Safety / electrical class: Class I apparatus construction (protective earth required).
- Compliance: CE; Safety: EN 60065:2014, Class I.
- Warranty period: 3 years.
- 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	2026-08-24	Initial version	Tamas Forgacs