

ELM HUB.

Installation-grade control hardware, rack mountable (3RU, 19"), pre-loaded with ENTTEC LED MAPPER (ELM) 2026 and Windows 11 Pro. Built for sites that need a reliable, on-premise computer running pixel light shows 24/7.



32,768

universes per protocol, ELM maximum

2 × 10GbE

independent 10 Gigabit Ethernet ports

0–50°C

rated continuous operating range

3 years

return-to-base manufacturer warranty

ELM HUB is purpose-specified to run ENTTEC's award-winning pixel mapping software, ENTTEC LED MAPPER (ELM), at its full capability. Its compute, graphics and networking are matched to ELM's feature set so every tool in the software – 2D and 3D mapping, HD video playback, generative effects and audio reaction – is available at maximum scale, up to 32,768 universes per output protocol.

The compact 3RU chassis is designed for continuous, around-the-clock operation. Dual network adaptors let the unit sit across two separate networks – typically one for control and one for the pixel data backbone. A mix of steel and aluminium keeps the unit light without sacrificing robustness, and dual ventilation paths maintain thermal headroom at ambient temperatures up to 50°C.

ELM 2026 ships pre-installed and configured. ELM licences are stackable, perpetual and purchased separately, so the universe count can be scaled to the project at any time without changing hardware.

FEATURES

- Robust rack mount unit – 3RU, 19-inch rack mount compatible, with mounting ears fitted.
- Hardware specified to run ELM's complete feature set at its maximum capacity, including 3D mapping, multi-layer HD video playback and generative effects.
- Dual 10 Gigabit network adaptors on locking Ethercon connectors, allowing connection to two separate networks.
- 1TB internal SSD for media libraries, show files and content.
- Dual ventilation paths for thermal management in ambient temperatures up to 50°C.
- Built-in front monitor gives an at-a-glance overview of ELM and network status; three Mini DisplayPort outputs connect external displays.
- Two front-panel USB 3.0 ports for keyboard and mouse during configuration.

HARDWARE SPECIFICATION

SYSTEM

Operating system	Windows 11 Pro, 64-bit
Pre-loaded software	ENTTEC LED MAPPER (ELM) 2026, installed and configured
Compute & graphics	Specified to support all ELM features at their maximum rated capacity. Configuration is reviewed continuously; contact ENTTEC for the current build sheet.
Storage	1TB SSD (internal)
Display	Built-in front-panel monitor; up to 3 external displays via Mini DisplayPort
Duty cycle	Continuous, 24/7 unattended operation

CONNECTORS & NETWORK

Network	2 × 10 Gigabit Ethercon (RJ45), independently addressable
Network speed	10 Gb/s per port
USB	2 × USB 3.0 (Type A), front panel
Video out	3 × Mini DisplayPort
Power inlet	1 × IEC-320 C14

POWER & THERMAL

Input voltage	100-240 VAC (50-60 Hz)
Input current	10 A max
Max power consumption	800 W
Max heat dissipation	400 W
Cooling method	Forced air, fan cooled — dual ventilation paths
Operating temperature	0°C to 50°C / 32°F to 122°F
Operating humidity	5% to 95%, non-condensing

PHYSICAL, COMPLIANCE & SUPPLY

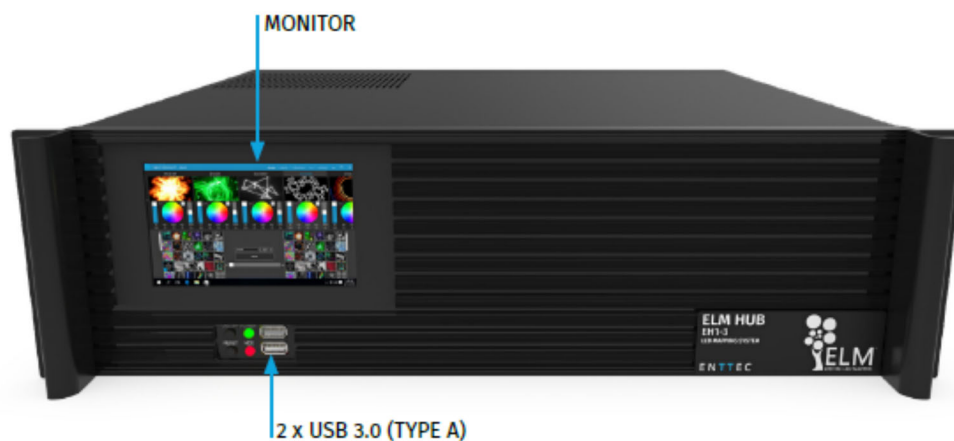
Body material	Steel and aluminium
Mounting	3RU, 19-inch rack mount
IP rating	IP20 — indoor, dry locations only
Unit dimensions	465 × 434 × 133 mm (18.31 × 17.09 × 5.24 in), excluding rack ears
Unit weight	8.35 kg / 18.4 lbs
Shipping dimensions	600 × 600 × 200 mm
Shipping weight	9.85 kg / 21.7 lbs
Warranty	3-year return-to-base manufacturer warranty
Certification	
Box content	1 × ELM HUB, 1 × IEC power cable Please specify region of use when ordering; AS/NZS 3112 is supplied by default.

ELM SOFTWARE SPECIFICATION

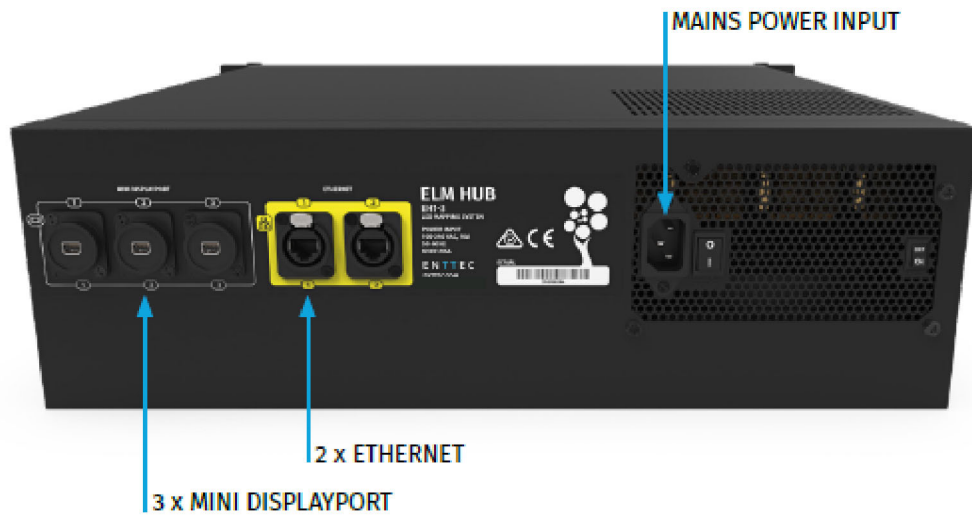
ELM (ENTTEC LED MAPPER) 2026 is pre-installed on every ELM HUB. The figures below are the software's rated capabilities; ELM HUB is specified to deliver them. A licence is required to unlock output and is purchased separately.

Version pre-loaded	ELM 2026 (Windows, 64-bit)
Maximum output	32,768 universes per protocol – the ELM maximum. ELM HUB's compute and networking are specified to support this ceiling.
Licensing	Not included – sold separately. Perpetual, node-locked licences that stack to increase the available universe count; no dongle and no internet connection required once activated.
Output protocols	Art-Net, sACN, KiNET
Synchronisation	ArtSync and sACN sync, individually enabled
Remote control	DMX, OSC and HTTP APIs as standard; serves static web interfaces on the local network
Mapping	Vector-based 2D and true 3D pixel mapping; multi-segmented and custom shapes; per-slice control of 3D structures; LED snapshot export
Fixture support	RGB, RGBW, RGBA, RGBAW/RGBWA and white fixtures, including 16-bit protocols such as ENTTEC SPXL-16
Media inputs	HD video files, still images, camera feeds, NDI receive and SPOUT live video input
Effects & audio	100+ built-in generative effects; audio-reactive Eye Candy with 8 audio input channels, per-channel volume and high/low frequency control, ASIO support
Playback	Live interaction, built-in scheduler for unattended 24/7 playback, or DMX control from a lighting console
Framework	.NET 4.8 (installed)

CONNECTOR LAYOUT

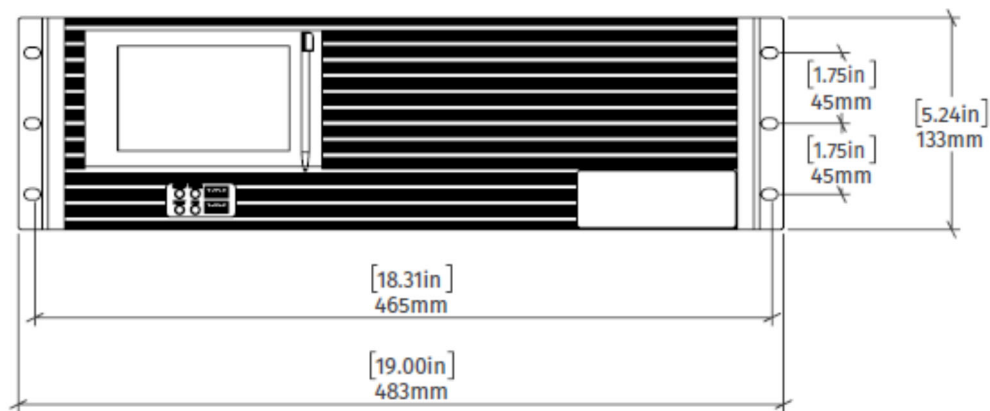


Front panel – built-in status monitor, power button and 2 × USB 3.0 (Type A).

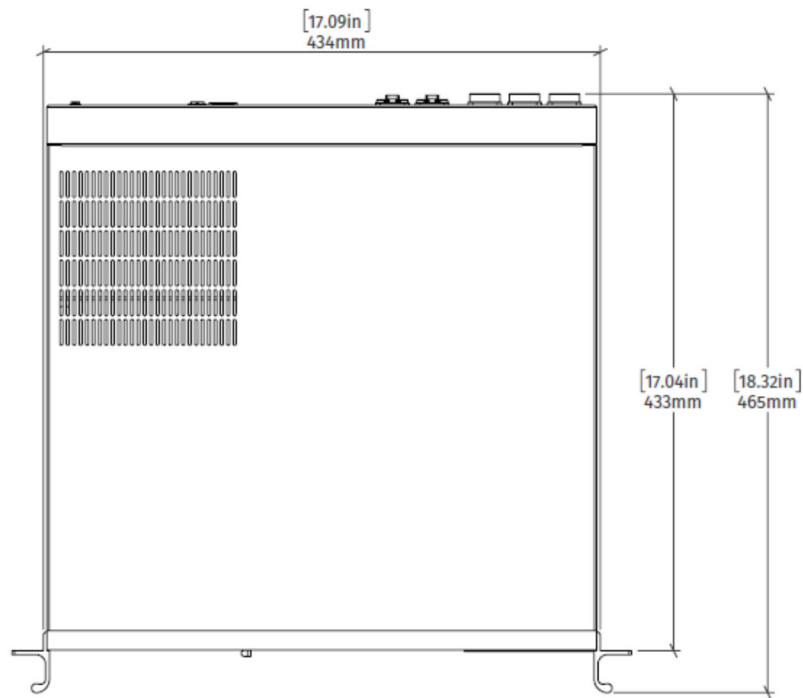


Rear panel — 3 × Mini DisplayPort, 2 × 10 Gigabit Ethercon and IEC-320 C14 mains input.

DIMENSIONS

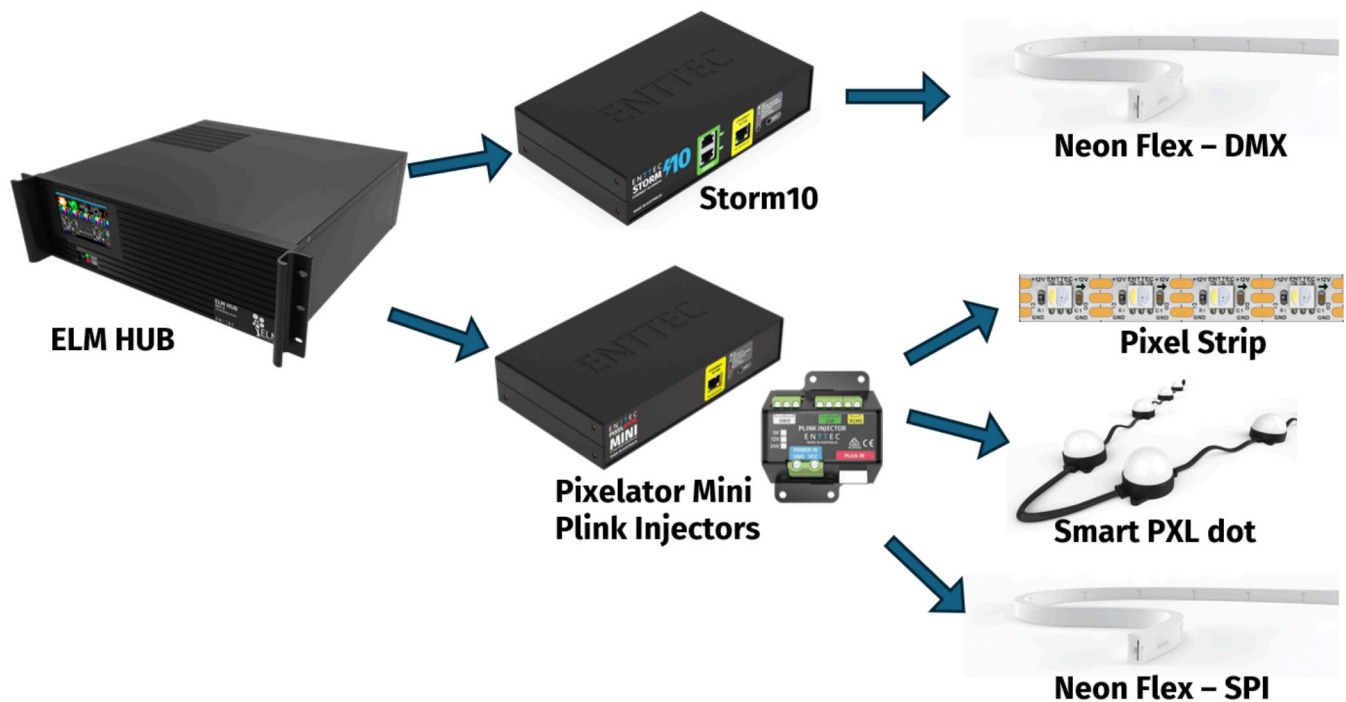


Front elevation — 483 mm (19.00 in) across rack ears, 133 mm (5.24 in) high.



Plan view — 434 mm (17.09 in) wide, 465 mm (18.32 in) deep including ears.

SYSTEM DIAGRAM



A typical topology: ELM HUB outputs Art-Net or sACN over its two networks to ENTTEC gateways and pixel controllers, which drive DMX and SPI fixtures.

ORDERING INFORMATION

ITEM	DESCRIPTION	SKU
ELM HUB	3RU LED mapping system, Windows 11 Pro, ELM 2026 pre-loaded	70700
ELM licence	Perpetual, stackable universe licence — specify universe count when ordering	70581

For further support and to browse ENTTEC's range of products, visit [enttec.com](https://www.enttec.com).