

# Lighting Control Engine 3 fx+



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The Lighting Control Engine 3 fx+ (LCE3FX+) serves as a high-performance server for controlling large lighting projects, with pre-installed e:cue SYMPHOLIGHT and Lighting Application Suite (LAS). As a central control unit, this versatile light control server orchestrates all devices and lights within a project. The LCE3FX+ has integrated digital dry contacts, two single-pole relay outputs and support for a wide range of Ethernet-based protocols. Additionally, Emotion FX video mixing is fully supported in the LCE3FX version. Shows and light scenes can be controlled with the internal web server via mobile devices, web browsers or via cloud applications. A built-in status display on the front shows system and software messages. The LCE3FX+ is the ultimate server solution for any demanding lighting project.

## Highlights

- Built-in Video Capture Card
- Software licenses for e:cue's SYMPHOLIGHT and Lighting Application Suite, pre-installed
- High quality industrial components for reliable uninterrupted and efficient 24/7 operation of SYMPHOLIGHT and LAS
- 2 x M.2 SSD disk drive in RAID 1 operation for increased system stability
- Integrated dry contact inputs (6x) and relay outputs (2x)
- LC display and cursor keys for status messages
- Easily mountable in 19 inch racks, space saving (3U)
- 5 years of support and warranty

## e:cue Interfaces

Lighting applications are heterogeneous by nature. e:cue interfaces serve to integrate many networks, protocols and third party products into e:cue solutions. They also aid in applying special control functions for fixtures, they integrate analog or mechanical signaling into the digital world and offer bridging functions. e:cue interfaces are the links to bring together the many techniques and technologies of lighting control.

## Delivery scope

- e:cue Lighting Control Engine 3 fx+ including Microsoft® Windows 10™ IoT Enterprise and software licenses for e:cue's SYMPHOLIGHT and Lighting Application Suite
- Printed LCE3FX+ Information for Use (English / German), safety instructions
- Rack mounting rails, including screws
- 1 x mini DisplayPort to DVI, HDMI, VGA adapter
- 2 x IEC-C13 power cord (EU and UK versions)
- Dry contact plug
- 2 x relay interface plug

## Identcode

CL23100146935

## Technical data

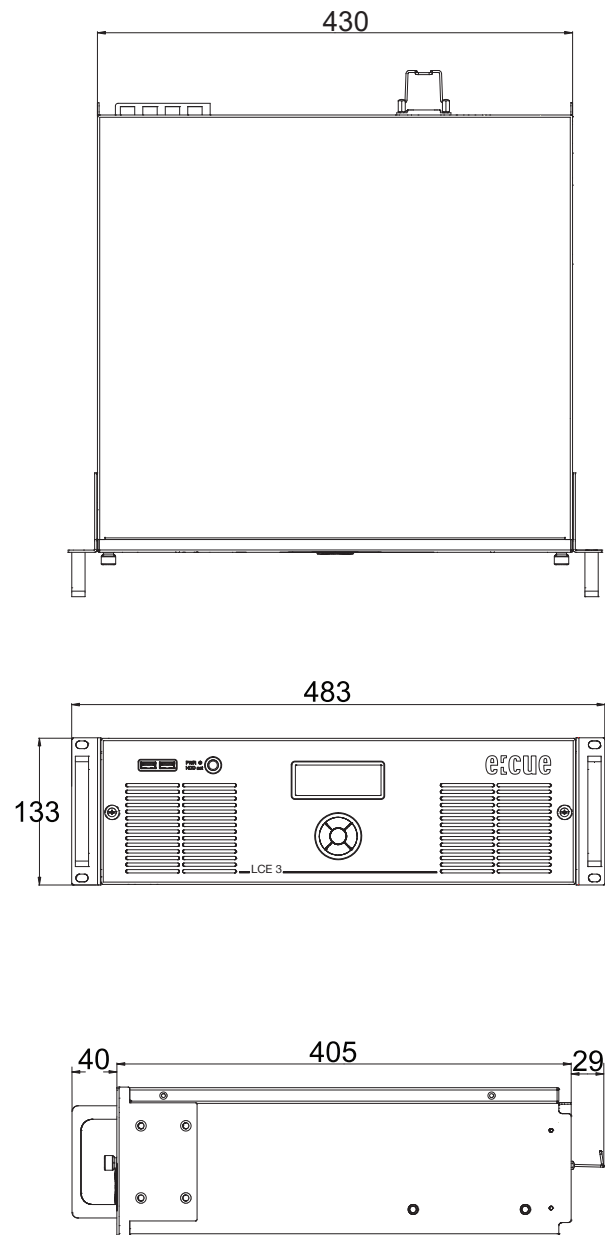
Dimensions (W x H x D)	483 x 133 x 405 mm / 19.02 x 5.24 x 15.04 in (incl. mounting brackets)
Weight	12.3 kg / 27.12 lb (incl. mounting brackets)
Power supply input	100 ... 240 V AC, 50/60 Hz
Power consumption	110 W typically (incl. video capture card), efficiency up to 92.5%
Operating temperature	0 ... 40 °C / 32 ... 104 °F
Storage temperature	-10 ... 70 °C / 14 ... 158 °F
Operating / storage humidity	0 ... 80% RH, non-condensing
Protection class	IP20
Housing	Steel, front panel powder coated
Mounting	in 19-inch rack with rails
Certifications	CE, FCC, UKCA

**Interface specifications**

USB	2 x USB 3.0 (front) 4 x USB 3.2 Gen 1 (rear) 2 x USB 2.0 (rear)
Digital dry contacts	6 x inputs, $V_{in} = 5 \dots 24 \text{ V DC}$ 1 kV galvanically isolated off: $V_{in} < 1 \text{ V DC}$ , on: $V_{in} > 4 \text{ V DC}$ Input current $I_{in}$ (typical): $V_{in} = 5 \text{ V} / I_{in} = 0.8 \text{ mA}$ $V_{in} = 12 \text{ V} / I_{in} = 2.3 \text{ mA}$ $V_{in} = 24 \text{ V} / I_{in} = 4.8 \text{ mA}$ 12 V DC output, max. 70 mA, overload protected
Relay outputs	2 x SPDT Nominal voltage: 250 V AC Continuous current: 12 A (CE, CSA), 10 A (UL, provided plug's limitation) Inrush current: 50 A (max. 20 ms) Isolation between open contacts (1 kV)
User interfaces	LC Display, Keypad
Ethernet-Ports	1 x e:net 10/100/1000 Mbps, RJ45 1 x e:net 10/100/1000/2500 Mbps, RJ45
Serial interfaces	2 x RS-232
Keyboard / mouse	2 x PS/2
Graphics	1 x HDMI 2 x DisplayPort 3 x mini DisplayPort
Video input	DVI Input Capture, 1920 x 1080 @~80 fps, max. 2048 x 2160 pxl or max.144 fps
Audio	1 x microphone 1 x audio/line output 1 x audio/line input
Data storage	2 x M.2 SSD HDD (RAID 1 config)
Media drives	CD/DVD via USB port (not included)

**Dimensions**

All measures in mm



Connectivity

Rear side

