e:cue

AM313830035

e:cue
SYMPL Switch

Information for Use

Downloads and more information at:
www.ecue.com

Table of Contents

1 Safety instructions

Please read the safety instructions, provided in a separate manual, carefully. Make sure that the environmental, mounting, and installation prerequisites are met. This manual should be kept at a safe place and in reach of the device.

1.1 Symbols

⚠ The exclamation mark warns about possible damage of the device itself, to connected devices, and to the user.

ℹ The information symbol gives general hints and informs about handling and procedures for use of the device.

1.2 General instructions

⚠
— Connect cables and data only when the device is powered down.

— The maximum length of each connected cable is 30 m.

— When using a power supply unit, the device must be supplied by a separate power supply that is certified according to the local regulations (e.g. SELV, Class 2).

ℹ
— If safety instructions are missing, please contact Traxon e:cue to receive a new copy.

2 General device description

The SYMPL Switch fits perfectly with the e:cue SMYPL range. e:cue SYMPL Nodes are a system of interfaces for e:cue SYMPHOLIGHT only. They provide various connection types like DMX/RDM, DALI, digital inputs and outputs etc. SYMPL Nodes always operate in online mode, as a device interface for SYMPHOLIGHT. All interactions are initiated and controlled by SYMPHOLIGHT. Connections between servers, Cores and Nodes are always made with e:net via Ethernet.

The SYMPL Switch is a designed Ethernet switch for up to 5 devices. It features PoE to power the connected devices over Ethernet. With PoE the connected devices do not need an additional power supply.

The SYMPL Switch is powered by an external power supply. It is easily mounted on standard 35 mm DIN rails, or with a key hole in the housing base on walls or on any stable vertical surface. The SYMPL Switch is a simple, reliable and easy to use switch solution for e:cue lighting control solutions with SYMPHOLIGHT

ℹ
— To operate SYMPL Nodes a SYMPHOLIGHT version 2.0 or higher is mandatory. Earlier versions do not support the SYMPL Nodes. SYMPL Nodes are not supported by the e:cue Lighting Application Suite.

— e:cue SYMPL Switch is not hot-pluggable.

2.1   Delivery content

Delivery content for the e:cue SYMPL Switch (AM313830035):

1. e:cue SYMPL Switch
2. Safety instructions
3. Welcome note

2.2   Product specifications

Dimensions (W x H x D)	53.5 x 90.5 x 62 mm/ 2.1 x 3.6 x 2.4 in (excl. fastening clip)
Weight	80 g / 0.18 lb
Power supply	24 V DC (terminal plug) wire gauge: 0.21 ... 3.31 sqmm; or for PoE: 48 V DC only
Power consumption	2 W (no PoE powered devices connected)
Operating temperature	-20 ... 50 °C / -4 ... 122 °F
Storage temperature	-20 ... 70 °C / -4 ... 158 °F
Electrical safety	SELV
Op./storage humidity	0 ... 80% non-condensing
Protection Class	IP20
Installation	Indoor installation only, intra building communication only
Housing material	Self extinguishing blend PC/ABS UL document E140692
Mounting	on 35 mm DIN rail (DIN 43880), 3 units or with key hole on any stable vertical surface
Certification	CE, ETL, UKCA

Interface specifications

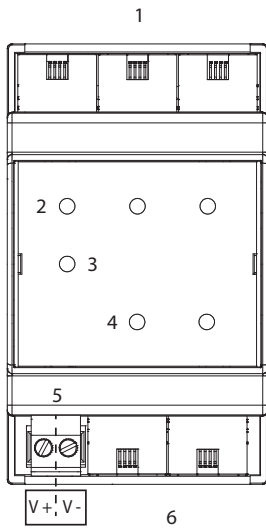|	
Interfaces	5 x e:net 10/100 Mbit/s, RJ45
PoE-Ports	PoE Mode B (PoE over spare wires) according to IEEE802.3af not galvanically isolated from Ethernet data P_{max} = 13 W per PoE Port
User interfaces	LEDs for Power, Ethernet activity, PoE applied

2.3   Connectors and interfaces

View from top:

1	Ethernet ports 1 to 3	„4.3 Ethernet connection" on page 07
2	e:net LEDs for ports 1 to 3 (Ethernet, LAN activity)	„2.4 User interface: LEDs" on page 05
3	Power LED	
4	e:net LEDs for ports 4 and 5 (Ethernet, LAN activity)	
5	Power supply (Vcc+, Vcc- left to right): 24 V DC. For PoE 48 V DC only.	„4.4 Power supply" on page 07
6	Ethernet ports 4 and 5	„4.3 Ethernet connection" on page 07

2.4   User interface: LEDs

The SYMPL Switch has six LEDs on the front panel. The six LEDs show the basic states of the SYMPL Switch.

LEDs

Power	Off: no power.
	On: power supplied.
Act/PoE	Off: no link available.
	Green: link established; e:net link/ traffic.
	Red: PoE supplied.
	Orange: PoE supplied and e:net link/ traffic.

3   General remarks

3.1   Transport

Only transport the device in its original packaging. This protects the device from damage.

3.2   Unpacking

Only unpack the e:cue SYMPL Switch at its installation location. To protect the device against condensation water, unpack it and wait until all moisture remaining in the device has evaporated. Condensation can occur when the device is moved from a cold to a warm location. Keep the packaging for use in case of further transport. Inspect all parts for completeness regarding chapter „2.1 Delivery content" on page 04. If there is apparent damage to the device or parts are missing from the delivery scope, please contact the Traxon e:cue support service.

3.3   Warranty regulations

Depending on the product, warranty regulations are of different duration. The warranty time is usually noted in the quote and in the order confirmation. See www.traxon-ecue.com/terms-and-conditions for details. Legal warranty regulations apply in any case.

3.4 Maintenance and Repair

This device requires no maintenance.

> ⚠ — Before dismounting, appropriate measures must be taken to protect the respective components against damage caused by electrostatic discharge (ESD protection).
>
> — Do not try to repair the device. Return it to your Traxon e:cue distributor for replacement or repair.

3.5 Disposal

> 🗑 Batteries and technical appliances must not be disposed of with domestic waste, but should be handed in at the appropriate collection and disposal points.

The proper disposal of packing materials and of the device is the responsibility of the respective user and for his account; in all other matters, the retrieval obligation for packing materials and the device is subject to the statutory regulations.

3.6 Support

In case of technical problems or questions regarding installation and repair please contact:

Traxon Technologies Europe GmbH
Customer Service
Karl-Schurz-Str. 38
33100 Paderborn, Germany
+49 (5251) 54648-0
support@ecue.com

4 Installation

> ⚠ — Connect cables and data only when the device is powered down.
>
> — Each cable should not exceed a length of 30 m.

The installation of the SYMPL Switch consists of mounting the device, connections to e:net and to power supply.
The sequence of cabling is not defined. Supply the SYMPL Switch with power after all cabling is completed; it starts booting.
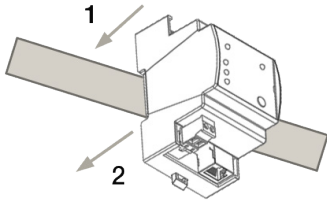
4.1 Installation conditions

Installation position	Terminals on top and bottom
Horizontal spacing	No spacing necessary
Minimum vertical rail grid spacing	115 mm (90 + 25 mm) (excluding conduit)
Recommended vertical rail grid spacing	160 mm (with 40 mm conduit)
Installation location	Indoor

4.2   Mounting process

The e:cue SYMPL Switch is designed to mount onto a 35 mm DIN rail (EN 60715) in a vertical position.

1. Clip the device to the rail from top.

2. Gentle pressure is then applied to the top front to snap it in place. The SYMPL Switch has been mounted successfully.

You can also mount the e:cue SYMPL Switch on any flat vertical surface. Use 3 to 3.5 mm screws for the hanger hole.

i   For mechanical stability, mounting on a rail is recommended.

4.3   Ethernet connection

The pin-assignment of the Ethernet port corresponds to RJ45 standards. You can use every common Ethernet component, like cable. Connect the SYMPL Switch at the designated Ethernet interface with a patch cable (RJ45, CAT5).

i   The Ethernet port of the SYMPL Node is not designed for inter-building connections with power and lighting transients. Use only intra-building networks to connect the SYMPL Nodes and Cores.

4.4   Power supply

Connect the SYMPL Switch to a certified NEC Class 2 24 V DC power supply unit. To use PoE on any connected device, connect a NEC Class 2 48 V DC power supply unit. Present power supply equates to the status "On" or running of the SYMPL Node.

To connect the device to a power supply unit, use the provided 2-pole terminal and lay the wires as stated on the front label. The voltage assignment is left V+ and right V-.

Turn the power on when all cables are connected to the SYMPL Switch.

⚠   — When using PoE, the SYMPL Switch is not suited for powering over a DC power supply network. Use the provided, dedicated power supply unit in the control cabinet for supplying 48 V DC to the SYMPL Switch.

i   — The PoE ports are not galvanically isolated from ethernet data.

5   Dismounting

⚠   Before dismounting, appropriate measures must be taken to protect the respective components against damage caused by electrostatic discharge (ESD protection).

Disconnect all attached cables. Dismount the e:cue SYMPL Switch from the rail by pulling the black DIN rail

handle and unhitching the SYMPL Switch. The dismounting is completed.
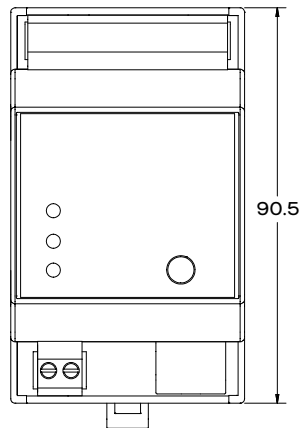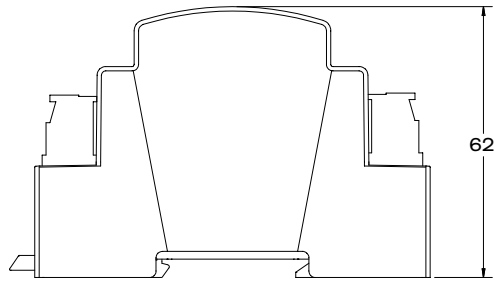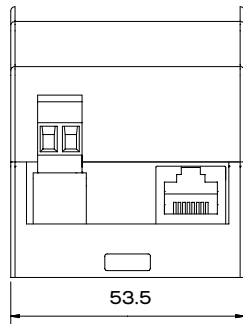
6   Certifications

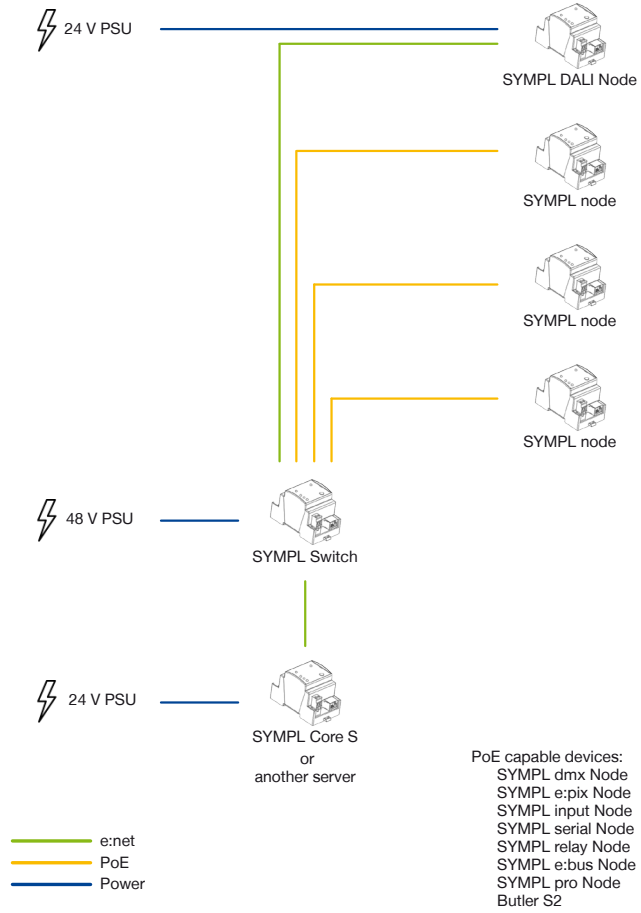Conforms to UL Std. 62368-1

Certified to CSA Std. C22.2 NO. 62368-1

7   Dimensions

All dimensions in mm

53.5

62

90.5

8   Illustration PoE

24 V PSU

SYMPL DALI Node

SYMPL node

SYMPL node

SYMPL node

48 V PSU

SYMPL Switch

24 V PSU

SYMPL Core S
or
another server

PoE capable devices:
SYMPL dmx Node
SYMPL e:pix Node
SYMPL input Node
SYMPL serial Node
SYMPL relay Node
SYMPL e:bus Node
SYMPL pro Node
Butler S2

——— e:net
——— PoE
——— Power

content

content