# controlCUE-enocean-d

Ethernet IP Enabled Controller with EnOcean® Interface

**cue**

## Main Features

- Wired 10/100 BaseT LAN
- 1x EnOcean® 868 MHz RF interface, external antenna
- 1x Bi-directional serial RS-232/485 port
- 4x Versatile port
- ARM® processor platform
- Internal RAM LPDDR 64 MB, flash 256 MB
- Onboard real time clock
- IR code capture sensor
- Front panel indicators
- 24 VDC or Power over Ethernet power supply
- DIN rail plastic enclosure, width 4 modules
- Web server and Admin Web pages for setup

## Description

The controlCUE-enocean-d is fully functional IP controller with EnOcean® 868 MHz wireless radio interface, one bi-directional RS-232/485 port and four versatile ports. Fully compatible with CUE touch panels and mobile applications, this controller provides bi-directional communication between Cue System and EnOcean® system and it can work as a standalone device. Bi-directional monitoring and control of EnOcean® networks can be provided from IP network. EnOcean® wireless standard offers many of switching and dimming receivers, receivers for blinds, wall mounted and mobile transmitters, input and temperature transmitters, infra passive switches, sensors etc.

Versatile port input modes are as follows

- Digital input for potential free contacts, push-buttons, switches, digital inputs 24 V, S0 energy meter outputs, etc. In addition this mode can be used for pulse counting and digital signal frequency measurement.
- Resistance input for temperature sensors, resistors, potentiometers, etc. Standard temperature sensors Pt1000, Ni1000, NTC 12k, KTY 81-121 can be connected and allow temperature measurement.
- Voltage input for sensors equipped with voltage output.
- Current loop passive input for sensors equipped with current loop output 0 / 4 ÷ 20 mA. External resistor is needed for this mode.

Versatile port output modes are as follows

- Digital open collector for driving a relay coils, LED indicators, LED strips, etc.
- Current-source pull-up for LED, opto-triac, SSR, etc.
- Current-source pull-down for LED, opto-triac, SSR, etc.
- IR output for IR adapters and sprayers.
- Serial RS-232 output for serial controlled devices.

Single cable Ethernet connection provides easy network integration. The controller is equipped with Power over Ethernet (PoE) technology enabling an Ethernet network cable to deliver both data and power. The controller installs easily on a DIN rail or on a wall.
This controller comes complete with a web server and allows setup through a standard web browser. Unit programming is based on CUE's standard programming tool Cue Visual Composer.

## Application Diagrams
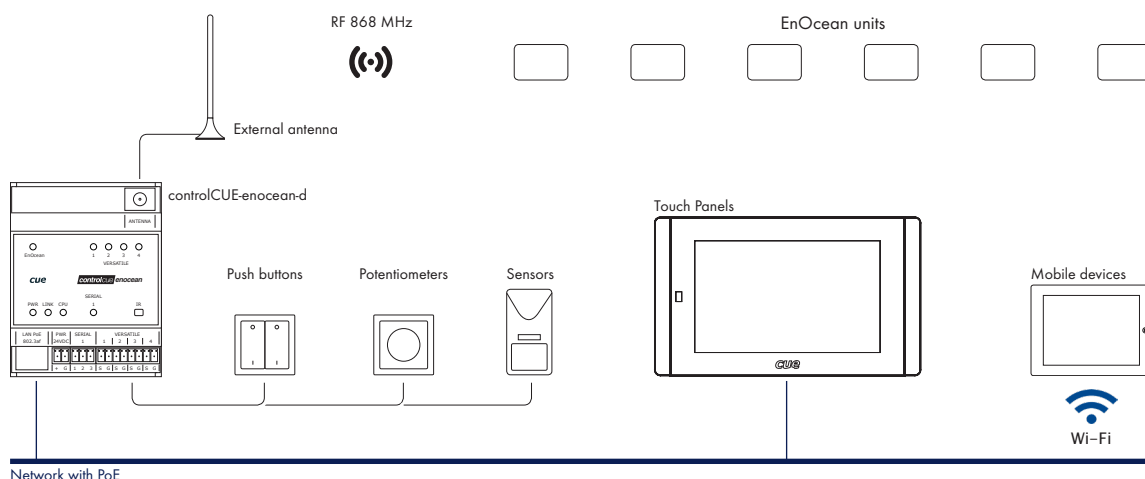


## Box Contents

Controller controlCUE-enocean-d
External antenna with magnetic base incl. cable
Connector set
Ethernet cable
DIN rail compatible power supply 24 VDC / 15 W
Quick Start
Declaration of Conformity & Warranty Conditions

## Order Information

Product code CS0458

# controlCUE-enocean-d

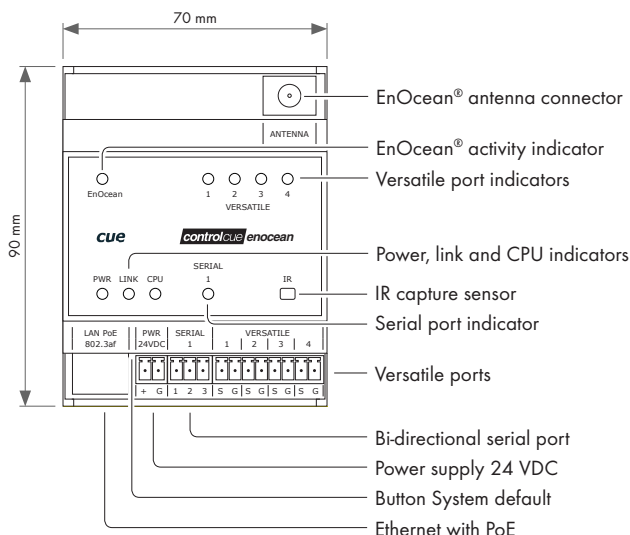Ethernet IP Enabled Controller with EnOcean® Interface
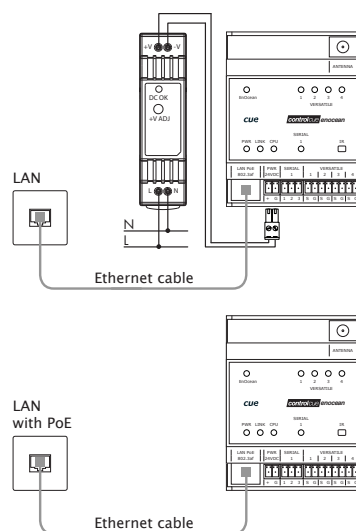
## Specifications

**Control ports**

1x EnOcean®, external antenna with magnetic base, cable length 2.5 m
868 MHz for Europe and countries adopting R&TTE specification

EnOcean® Equipment Profiles supported
- EEP A5-07-01 Listener
- EEP A5-07-01 Transmitter
- EEP A5-30-xx Listener
- EEP A5-30-02 Transmitter
- EEP A5-xx-xx Generic Listener
- EEP A5-xx-xx Generic Transmitter
- EEP D2-01-03 Listener
- EEP D2-01-03 Transmitter
- EEP D5-00-01 Listener
- EEP D5-00-01 Transmitter
- EEP F6-02-xx Listener
- EEP F6-02-xx Transmitter
- EEP F6-xx-xx Generic Listener
- EEP F6-xx-xx Generic Transmitter

1x Bi-directional serial, 3-pin 3.5 mm connector
RS-232/485 modes
Serial data baud rate 300 Bd ÷ 115 200 Bd (bps)

4x Versatile, 2-pin 3.5 mm connector, each port can be used as
Input protected to 30 VDC / -12 VDC

Digital input
Adjustable threshold
High sensitivity: binary 0 < 1.45 V, binary 1 > 2.05 V
Low sensitivity: binary 0 < 5.8 V, binary 1 > 8.2 V
Input impedance >100 kΩ
Adjustable digital filter

Digital pulse counter
Adjustable threshold and input impedance as above
Pulse length min. 1 ms, max. frequency 500 Hz
Max. number of pulses 2 147 483 647 (Long)
Adjustable digital filter

Voltage input
Range 0 ÷ 2.5 VDC, 0 ÷ 10 VDC, auto
Input impedance >100 kΩ
Resolution 10-bit, adjustable digital filter
Accuracy ±1 % of range (digital filter applied)

Resistance input
Range 2 kΩ, 20 kΩ, 200 kΩ, auto
Resolution 10-bit, adjustable digital filter
Accuracy ±1 % of range (digital filter applied)

Digital output
Open collector
Max. sink current 200 mA / max. 30 VDC
Catch diodes for use with inductive load

Current pull-up
Current-source pull-up 9 mA (max. 10 V)

Current pull-down
Current-source pull-down -9 mA (max. -10 V)

IR output
Maximum IR carrier frequency 500 kHz
Up to 3 original IR Adapter /i in parallel

Serial output
RS-232, serial data baud rate 300 Bd ÷ 115 200 Bd (bps)

**Internal IR sensor**

IR code capture

**LED indicators**

Blue Power - indicates power is presented and unit is ready.
Green Link - indicates network link and activity.
Yellow CPU - confirms the system default function is performed.
Green / Red KNX - indicates KNX port send / receive.
Green Serial - indicates serial data is being transmitted.
Red Serial - indicates serial data is being received.
Green Versatile - indicates output is closed.
Yellow Versatile - indicates IR or serial data is being transmitted.

**Button**

System Default sets default IP address and password.

**Real time and date**

RTC with battery backup

**Memory**

Internal RAM LPDDR 64 MB
Internal non-volatile flash 256 MB

**Software technologies**

Admin Web, XPL² Inside

**System communication**

10/100 BaseT Ethernet , RJ-45 connector

**Power supply**

24 VDC (+/-20%), 3 W, 2-pin 3.5 mm connector
Power over Ethernet (PoE), IEEE 802.3af compatible

**Physical**

DIN rail plastic enclosure compatible with DIN EN 50022
Width 4 modules
Dimensions 70 x 90 x 58 mm / 2.8" x 3.5" x 2.3"
Weight 0.2 kg / 0.5 lb

**Environment conditions**

Operating temperature 10° to 40° C
Storage temperature 0° to 60° C
Relative humidity 10% to 90% non-condensing

## Mechanical Description

- EnOcean® antenna connector
- EnOcean® activity indicator
- Versatile port indicators
- Power, link and CPU indicators
- IR capture sensor
- Serial port indicator
- Versatile ports
- Bi-directional serial port
- Power supply 24 VDC
- Button System default
- Ethernet with PoE

## Power Supply

Delivered DIN rail power supply 24 VDC can be used for areas without PoE infrastructure.

The integrated IEEE 802.3af PoE support allows installation in areas where PoE network infrastructure is installed.