controlCUE-enocean-d

Ethernet IP Enabled Controller with EnOcean® Interface

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

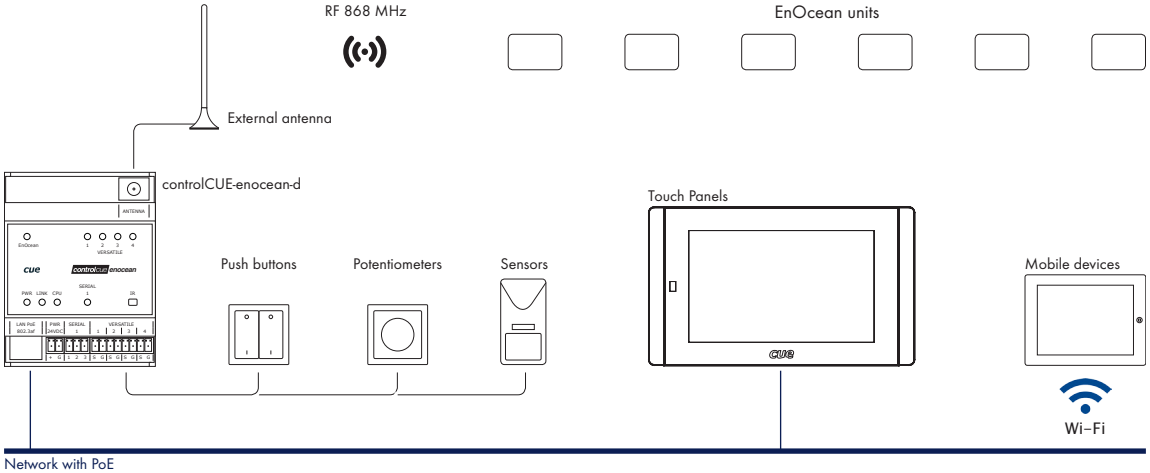
- Digital input for potential free contacts, pushbuttons, switches, digital inputs 24 V, S0 energy meter outputs, etc. In addition this mode can be used for pulse counting and digital signal frequency measurement.
- Resistance input for temperature sensors, resistors, potentiometers, etc. Standard temperature sensors Pt1000, Ni1000, NTC 12k, KTY 81-121 can be connected and allow temperature measurement with accuracy 0.5 °C.
- 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. External voltage max. 30 V, max. load is 200 mA.
- Current-source pull-up 12 V / 10 mA for LED, opto-triac, SSR, etc.
- Current-source pull-down -12 V / 10 mA for LED, opto-triac, SSR, etc.
- IR output for IR adapters and sprayers, max. carrier frequency 500 kHz.
- Serial RS-232 output for serial controlled devices, baud rate 300 Bd ÷ 115 200 Bd (bps).

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
Data Sheet, Declaration of Conformity
Cue System Connector Wiring Sheet

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
- 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 12-bit, adjustable digital filter
    - Accuracy ±0.1 % of reading, ±0.1 % of range (0.1 ÷ 10 V, digital filter applied)
  - Resistance input
    - Range 2 kΩ, 20 kΩ, 200 kΩ, auto
    - Resolution 12-bit, adjustable digital filter
    - Accuracy (digital filter applied)
      - 100 Ω ÷ 800 Ω: ±3 % of reading, ±0.1 % of range
      - 800 Ω ÷ 20 kΩ: ±0.3 % of reading, ±0.1 % of range
      - 20 kΩ ÷ 200 kΩ: ±1 % of reading, ±0.1 % of range
  - Digital output
    - Open collector
    - Max. sink current 200 mA / max. 30 VDC
    - Catch diodes for use with real load
  - Current pullup
    - Current-source pull-up 12 V / 10 mA
  - Current pulldown
    - Current-source pull-down -12 V / 10 mA
  - 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, XPL[2] Inside

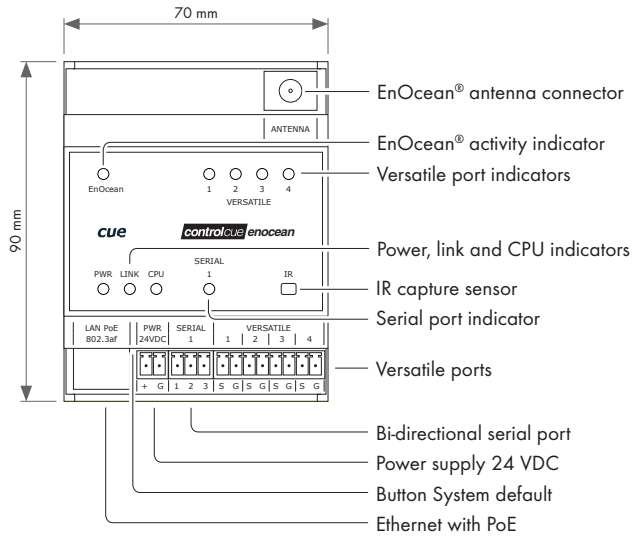
System communication
- 10/100 BaseT Ethernet , RJ-45 connector

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

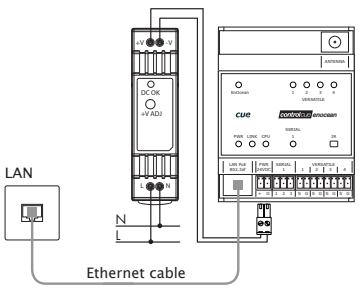
Physical
- DIN rail plastic enclosure compatible with DIN EN 50022
- Width 4 modules
- Dimensions 70 x 90 x 58 mm / 2.8" x 3.5" x 2.3"
- Weight 0.2 kg / 0.5 lb

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

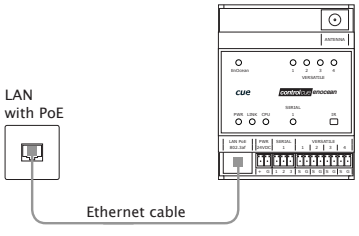
Mechanical Description



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.