



QUICKSTART
Smart EnOcean Gateway
DC-GW/EO-IP

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1. Introduction

It is highly recommended to carefully read this Quickstart guide before using the gateway. Should the gateway be provided to third parties, make sure to also provide this document. For more information about the gateway, related software, as well as the latest documents, visit our website at www.enocean-gateway.eu.

SYMBOLS:



WARNING! Important information regarding danger or risk.



NOTICE. The section contains additional important information.

HEALTH HAZARDS:

Use the device only for its intended purpose and role. The device is for indoor use only. Avoid exposing the device to humidity, dirt or dust. Avoid direct exposure to sunlight and other heat sources.



Avoid placing the device in metal enclosures. Such placement will affect the gateways ability to communicate with devices. Should the device be placed in an enclosed metal cabinet, make sure to place the antenna outside of the cabinet.

Do not open the device! In event of failure, please contact the DC support.



FAQ's and downloads can be found at: www.enocean-gateway.eu
In case of technical problems, please contact our support:
support@digital-concepts.eu



2. Functionality

This device is designed to integrate "EnOcean certified components" into an IP-based home control system. Its primary function is to act as a communication bridge between the EnOcean wireless world and IP networks. EnOcean sensors and actuators connected to the gateway can be controlled and accessed by using various interface commands. Registration and administration of the EnOcean components is done via the device's Web interface. A system commission is possible even with limited technical knowledge of EnOcean devices.

3. Package Contents

A. 1x Gateway



B. 1x Antenna



C. 1x Power supply (230V AC, 5V DC, 2A)



D. 2x Wall mounting brackets



E. 1x DIN rail adapter
4x Rubber feet
1x Screw for DIN rail mounting
4x Spare screws



4. Requirements

- stable and well configured network environment (with a DHCP server/router)
- CAT5 or higher quality network cable for connecting the gateway to a network
- current generation web browser for accessing the web interface (preferably Google Chrome or Mozilla Firefox)

5. Ports



- LAN [RJ45] with activity and link speed LEDs
- USB [4x]



- Antenna connector [RP-SMA]
- Power supply [DC IN]

6. Mounting



When choosing a mounting location for the device, be careful not to drill near existing electrical switches, sockets or known electrical cable positions.

a. Wall mounting

To mount the device to a wall, the wall brackets must be attached first. Two mounting brackets [D] need to be screwed to the devices sides. Unscrew the side screws, mount a bracket, then screw the mounting screws back in.

b. DIN rail mounting

Attach the DIN rail mounting clip to the back of the gateway and secure it with a screw [E].



c. Standalone

Peel off the covers of the supplied self-adhesive feet (E) and attach them to the corners on the bottom of the gateway.

7. Installation and device discovery

a. Hardware Installation

- Screw the antenna cable (B) into the appropriate port on the gateway (A).
- Connect the Gateway (A) with a network cable [Patch Cable RJ45 connector] to your network environment or router.
- Connect the power adapter supplied [C] to the gateway and plug it into a socket.



WARNING: 230 V main voltage to the power outlet.
Avoid physical contact! DANGER TO LIFE!

b. Accessing the Web Interface

There are several methods of discovering the gateway once it has been powered up:

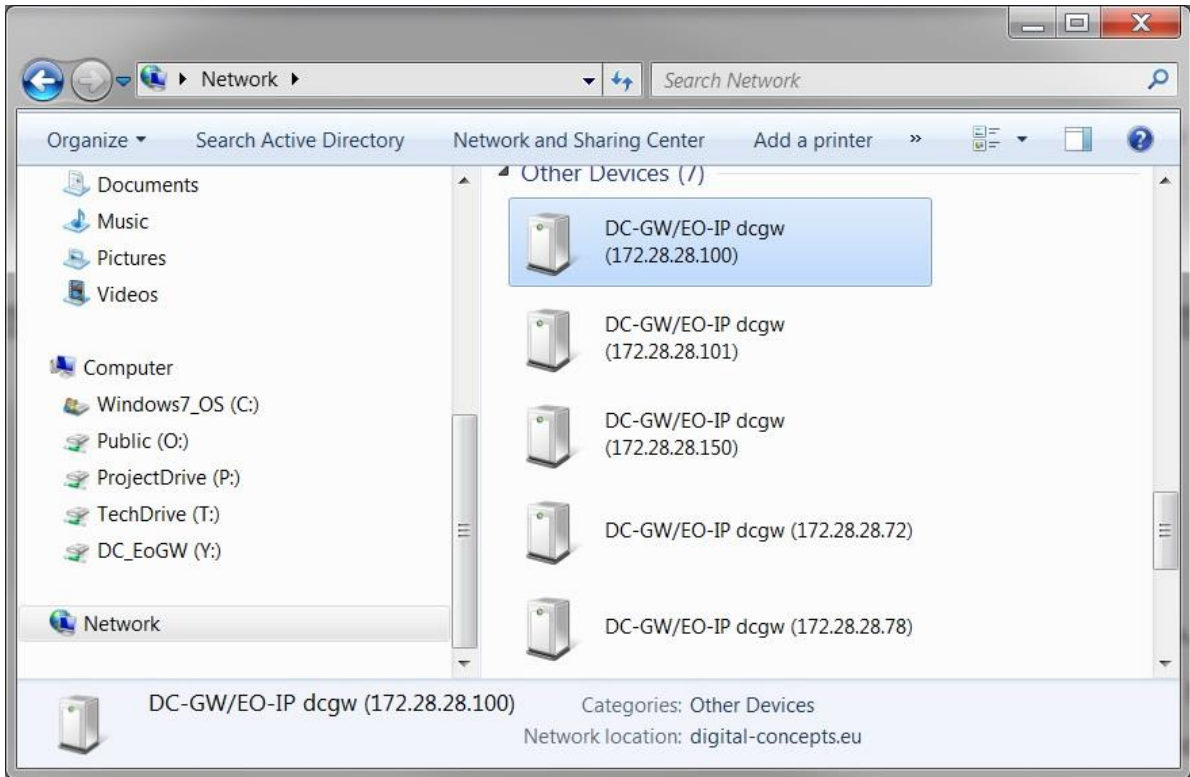
- UPNP (recommended for Windows systems)
- Bonjour (recommended for Apple devices)
- DHCP Server Entries
- USB Stick

UPNP

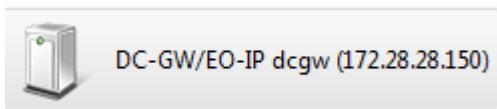
Discovering the Gateway via UPNP is recommended when using a windows operating system and a network environment where UPNP broadcasts are allowed. Start by opening the network menu item in the windows explorer:

[Start > Computer > Network]





The gateway should now present itself under the group "other devices":



The entry consists of a name followed by an IP Address. Double click will open the browser and take you to the login screen. If you right click on the properties, you can get additional information.



Note: In many business and industrial environments, UPNP broadcasts are blocked by switches or routers. Please consult your network administrator if you have trouble accessing the device.

Bonjour

When using MacOS or iOS environment, the recommended way of discovering the device is through the Bonjour service. Your networking environment must allow for Bonjour broadcasts. If you have trouble discovering the gateway, please contact your network administrator.



The gateway can be accessed by opening a web browser and typing the device's default name, "dcgw", followed by the extension ".local". In most cases, entering "dcgw.local" in your browser will take you directly to the login screen.



Note: In many business and industrial environments, Bonjour broadcasts are blocked by switches or routers. Please consult your network administrator if you have trouble accessing the device.

DHCP Server entries

If you have access to the local DHCP server, you should be able to identify the gateway by looking in the DHCP address list for an entry with the name dcgw.<local domain>. You can use the identified IP address to connect to device.

USB flash drive

Another option to identify the device's IP address is to plug in a USB flash drive. Wait for at least 60 seconds between powering-up the gateway and inserting the flash drive. Once the boot procedure is finished, a text file will be written in a root directory of the USB flash drive. This file, named "dcgw-info.txt", will contain system information. Use the listed IP address to access the device's web interface.

--- example ---

This is DC-GW/EO-IP v0.99.1

MAC=b8:27:eb:fa:2c:5f

IP=10.1.6.2

--- example ---

In case of no Ethernet connectivity (due to problems with cabling, switches, routers, missing dhcp server, firewall, etc.), the file will have the following structure:

--- example ---

This is DC-GW/EO-IP v0.99.1

MAC=b8:27:eb:fa:2c:5f

IP=

--- example ---

Note: This feature only works on firmware 0.99.1 and above. Also, USB flash drive needs to be plugged in for at least 10 seconds. USB flash drives using more than one partition may not work. Try using different USB flash drive instead or format your drive properly (FAT32, one partition).



c. Login

- Enter your previously configured password (default password: admin)



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Smart EnOcean Gateway v0.98.6

Welcome to Smart EnOcean Gateway - Please login

Password: Login

The help for the JSON REST-API can be found directly under [Port 8080](#).
The required password can be changed inside this admin user interface at [API Port Settings](#).

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




Configuration details and further steps can be found in a separate document "DC GW / EO-IP Handbook". Download at www.enocean-gateway.eu in the support area.

8. Troubleshooting

- If the device is not responding, disconnect the power supply for 20 seconds, then plug the device back in.
- If the gateway is still not responding, please check all cable connections to the device. Verify that the network activity LEDs display normal operation.
- If EnOcean devices are not working reliably, try moving the gateway to another location or eliminate sources of potential RF interference.
- For more information, please visit: www.enocean-gateway.eu
- If you encounter technical problems, please contact our support at Digital Concepts GmbH
- Telefon: +49 711 508 704 – 70
- support@digital-concepts.eu



9. Technical specifications

| Technical Specifications | |
|---|---|
| Device model name: | DC-GW/EO-IP |
| Power supply | 5 V DC , 600 mA |
| Dimensions (HxWxD): | 41 x 72 x 109 mm |
| Weight: | 285 g (without Power Supply) |
| Operating temperature: | 5 to 35 °C |
| Electric consumption (max): | 3,0 W |
| Connections: | 1x LAN(RJ45), 1x Antenna connector, 4x USB |
| RF band: | 868MHz |
| Range: | Without obstacles up to 30m |
| Chipset: | TCM 310 / EnOcean Chipset – bidirectional |
| Features | |
| Setup-GUI | Web-Interface |
| Import/Export of Configuration | Yes |
| Database | MySQL (out of the Box) |
| API (dual) | Simple String, Restful JSON based Commands |
| We reserve the right to make changes to the technical specifications | |
| Symbols | |
|  | The conformity of the product with the applicable EC directives. |
| RoHS | Tested in accordance with EU directive 2011/65 / EU - "Restriction of certain Hazardous Substances" - restriction of individual hazardous substances. |
|  | Protection class III - Safety extra low voltage according to EN 61140 Operation via safety transformer, double insulation between the power circuit and output voltage. Limits: 50V AC - AC / 120V DC - DC |
|  | WEEE Directive (Waste Electrical and Electronic Equipment) According to the European Directive 2002/96 / EC and 2012/19 / EU Disposal of the device is not in household waste but at an appropriate electronic waste collection point. WEEE-Reg.-Nr. DE 83788620 |
|  | Device is to be used for the designated purpose only. Device is to only be used with the provided power supply. |
| Areas of application | |
| | The device is only to be used in the designated areas of application: Application: Interior; Storage and Use: Dry |
|  | Tested in accordance with EMC Directive EN 61000 EN 61000-6-1 (Immunity to interferences Residential, ...) (Immunity for industrial environments) EN 61000-6-3 (interference emission living area, ...) EN 61000-6-4 (Interference emission industrial environments) |

10. CE declaration of conformity

Digital Concepts GmbH
hereby declares that the product complies

Smart EnOcean Gateway
Model: DC-GW / EO-IP

with the following standards or normative documents:

Directives:

EMV-Directive 2004/108/EG Electromagnetic compatibility
2001/95/EG product Safety
1999/5/EC Transmission radio R&TTE directive

Standards:

ETSI EN 301 489-1: (2001-09)
ETSI EN 301 489-3: (2002)
ETSI EN 300220-3: (2000-09)

DIN EN 55011 (2010-05) Kl. B
DIN EN 50090
DIN EN 55022 (2006) + A1 Kl.B
DIN EN 61000-6 (1-4) (2005)



Stuttgart, 08. May 2015, Oliver Fischer

Edition: English 7/2016

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