# QUICKSTART Smart EnOcean Gateway DC-GW/EO-IP V3

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#### 1. Introduction

It is highly recommended to carefully read this Quickstart guide before using the gateway. For more information about the gateway, related software, as well as the latest documents, please visit the website: <a href="www.enocean-gateway.eu">www.enocean-gateway.eu</a>.

#### <u>Symbole</u>



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: <a href="www.enocean-gateway.eu">www.enocean-gateway.eu</a>
In case of technical problems, please contact our support: <a href="support@digital-concepts.eu">support@digital-concepts.eu</a>

# 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 comission is possible even with limited technical knowledge of EnOcean devices.

# 3. Package Contents

<b>A.</b>	1x Gateway	((c))
В.	1x Antenna	
С.	1x Power supply (230V AC, 5V DC, 2A)	
D.	1x DIN rail adapter 4x Rubber feet 1x Screw for DIN rail mounting 4x Spare screws	

The illustrated items may look different depending on the purchased Variant.

# 4. Requirements

There are several prodonditions of ensure proper operation of the device.

- stable and well configured network environment (with a DHCP server/router)
- CAT5 or higher quality network cable for connecting the gateway to a network
- Latest generation web browser for accessing the web interface such as Google Chrome or Mozilla Firefox or similar. For latest information please referre to <a href="https://www.enocean-gateway.eu">www.enocean-gateway.eu</a>
- Sensors and Actors shall be within 20 meters Distance in buildings and 40 meters within sight distance. These Distances may differ depending on the structure of the building and the number of radio-transmitting-devices.

#### 5. Connectors



- LAN [RJ45] with activity and link speed LEDs
- USB [1x]
- Antenna connector [ANT
- Power supply [5V DC]
- Reset
- Power LED

# 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.

#### 6.1. Wall mounting

To mount the device to a wall, the drill holes of the housing may be used.

#### 6.2. DIN rail mounting

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

#### 6.3. Standalone use

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

### 7. Hardwareinstallation

- 1. Screw the antenna or the antenna cable (B) onto the antenna connector (A) of the gateway.
- 2. Connect the Gateway (A) with a network cable [RJ45 cable] to a network switch or router.
- 3. Connect the power adapter supplied [C] to the gateway and plug it into a socket.



WARNUNG: 230 V Netzspannung. Vermeiden Sie körperlichen Kontakt! Lebensgefahr!

## 8. First time operation

#### 8.1. Device detection and access

To access the device it first needs to be detected in the network. Once the IP adress of the gateway is known, it can be accessed through the DCG Configurator through any standard browser on a computer in the same network.

#### 8.2. Accessing the Web Interface

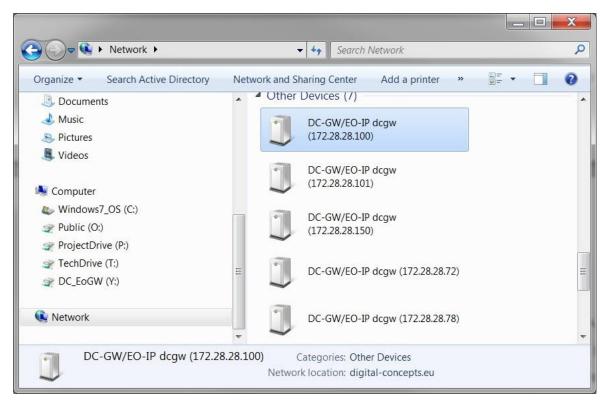
There are several methods to detect the gateway in the network once it has been powered up:

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

#### 8.2.1. Gateway detection in Windows Systems via UPNP

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 be listed under the group "other devices":
- The Entry displays the preinstalled device name and the IP Adress:



• 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.

You can also open a browser and type in the IP Adress of the device to opent the login page of the DCG Configurator

#### 8.2.2. Gateway Setup in OS-X Systems via 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.
- The default name is printed on your device.
- Alternatively you can detect the device with a Network Program and access the device by typing the IP adress in the Safari Browser adress line.



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.

#### 8.2.3. Device Setup via 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.

#### 8.2.4. Device Setup via 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 the 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 if the Gateway firmware is Version 0.99.1 or higher. 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).

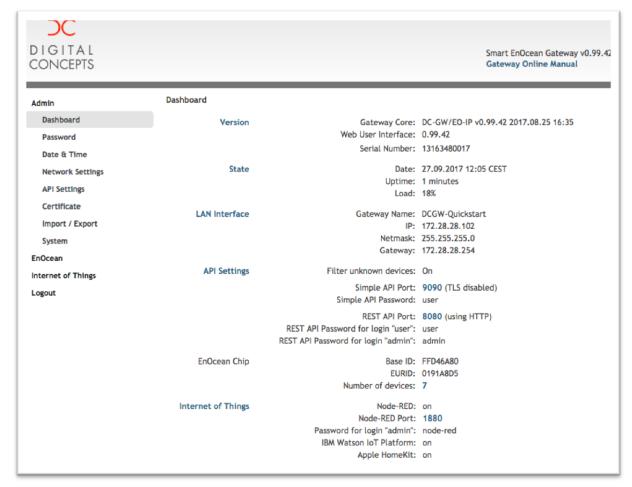
#### 8.3. Login to the DCG Configurator

Enter your previously configured password (default password: admin)



Configuration details and further steps can be found in the DCG Configurator manual. Download at www.enocean-gateway.eu in the support area.

# 9. DCG Configurator



After Login the above screen should apear. Please note that the GW name is predefinied and can be changed by the user. For further advice please click on the "Gateway Online Manual" (link in the upper right corner).

# 10. 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 <a href="mailto:support@digital-concepts.eu">support@digital-concepts.eu</a>

# 11. Technical specifications

Tablesian							
	l Specifications	DC OMM					
	odel name:	DC GW-V3					
Power sup	1 /	5 V DC , 2 A					
	ns (HxWxD):	26 x 85 x 103 mm					
Weight:		195 g (without Power Supply)					
	temperature:	5 to 35 °C					
	ensumption (max):	3,0 W					
Connectio	ons:	1x LAN(RJ45), 1x Antenna connector, 1x USB					
RF band:		868MHz					
Range:		Without obstacles up to 40m					
Features							
DCG Con		Configuration via Web-Interface					
	port of Configuration	Yes					
Data							
Database		MySQL					
SoftwareS	tack	DC OS 5, providing Simple String, Restful JSON based					
147		commands					
	· ·	ges to the technical specifications					
Symbols							
C€	The conformity of the pr	oduct with the applicable EC directives.					
RoHS	Tested in accordance with EU directive 2011/65 / EU - "Restriction of certain						
KOHS	Hazardous Substances" - restriction of individual hazardous substances.						
	Protection class III - Safety extra low voltage according to EN 61140						
		nsformer, double insulation between the power circuit and					
	output voltage.	120// DC DC					
•	Limits: 50V AC - AC / 1						
		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						
<b>∕ └─◎</b>	waste collection point.						
	WEEE-RegNr. DE 83788620						
$\overline{}$		the designated purpose only.					
		d with the provided power supply.					
<u>:</u>	,	1 1 11 /					
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 w	ith EMC Directive EN 61000					
111.	EN 61000-6-1 (Immunity to interferences Residential,) (Immunity for industrial						
<i>'1)))</i>	environments)						
		ence emission living area,)					
	EN 61000-6-4 (Interfere	ence emission industrial environments)					

# 12. 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) KI. B DIN EN 50090 DIN EN 55022 (2006) + A1 KI.B DIN EN 61000-6 (1-4) (2005)

> Stuttgart, den 27.09.2017 Oliver Fischer CEO

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