

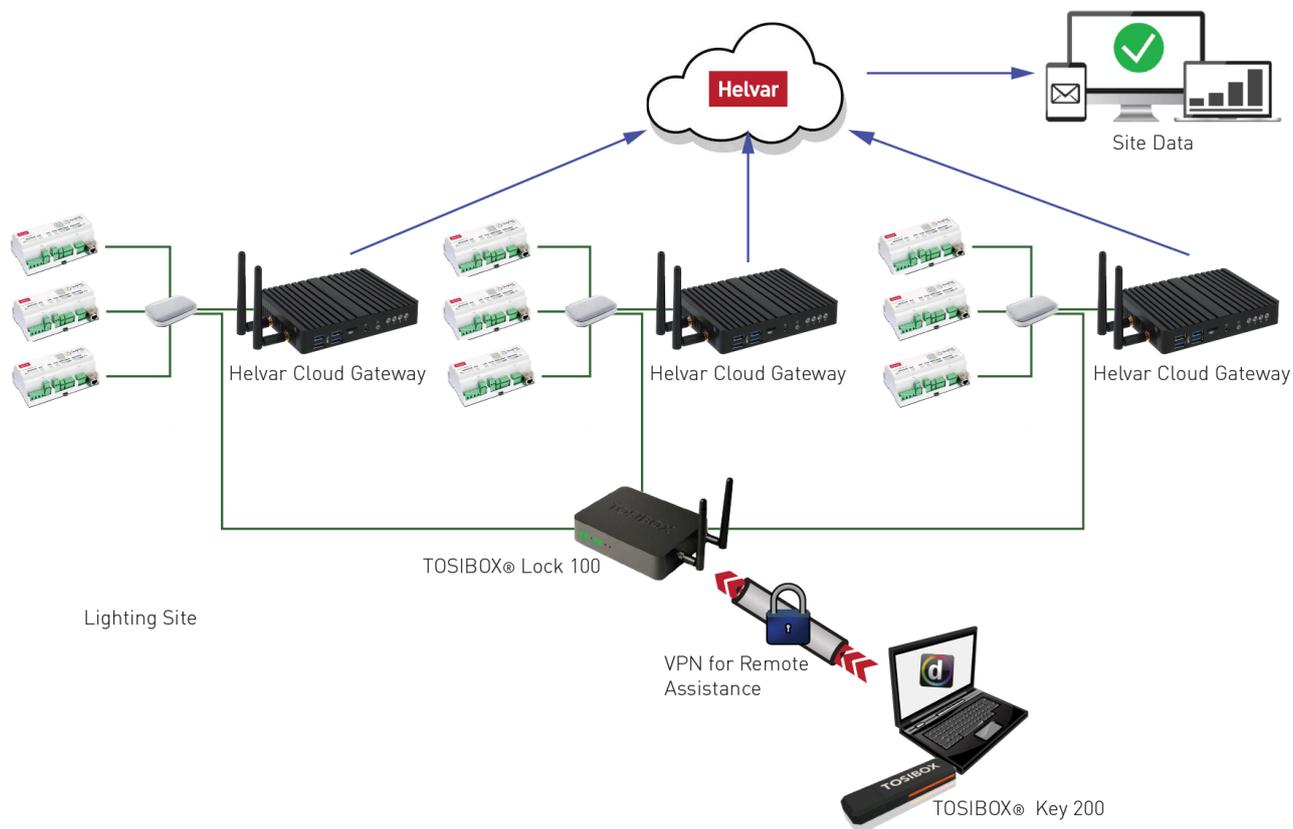
# Service Kit (Helvar Cloud Gateway)

Helvar's data driven Service Kit enables sending of data from a lighting system to a cloud platform where authorised users can access it through a REST API or a web browser interface.

The package also provides an encrypted VPN connection for remote Designer assistance to ensure optimal lighting system performance with very little downtime.

Helvar's Service Kit consists of the following products:

1. Helvar Cloud Gateway, featured on page 2.
2. TOSIBOX® Lock 150, featured on page 4.
3. TOSIBOX® Key 200, featured on page 4.



## Service Kit Options and Part Numbers

Name	Part No.	Description
Starter Kit	HCG1TBLK KIT	HCG + TOSIBOX® Lock 150 + TOSIBOX® Key 200
Next Site Kit	HCG1TBL KIT	HCG + TOSIBOX® Lock 150
Site Expansion Kit	HCG1 KIT	HCG
Spare / New Key	TBK2	TOSIBOX® Key 200

## Online FAQs

<https://helvarsupport.zendesk.com/hc/en-us>

# 1. Helvar Cloud Gateway

The Helvar Cloud Gateway (HCG) is a small-form-factor computer with leading performance and security.

This is the device that uploads the data from the lighting system to Helvar's Cloud Platform via Ethernet or Wi-Fi.

Authorised users can access the lighting system data via a browser-based web interface or a REST API.

## Key Features

- Connectivity to Helvar Cloud Platform
- Easy setup and configuration
- Secure connection
- DIN-rail mounting option
- 12 VDC, 30 W AC/DC DIN-rail power supply included
- Screw connectors for desired cable length between HCG and PSU

## Security

The access to the web interface and the APIs are both encrypted and authenticated.

Client and cloud data transfer is secured by HTTPS protocol.

Gateway to cloud communications uses the MQTT protocol, which is secured by leveraging TLS 1.2 at the transport layer. The cipher suite used for TLS is ECDHE-ECDSA/AES128-GCM-SHA256. For authentication between cloud gateway and cloud, AWS (Amazon Web Services) Signature Version 4 is used.

A full security document is available.

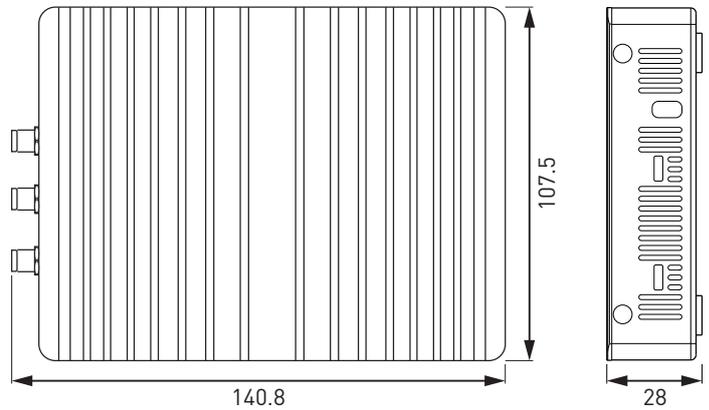
## Requirements

- Reliable Tosibox connection requires Designer and router version 5.4.3 or later.
- One workgroup per HCG.
- Each workgroup has a maximum of 100 routers.
- Support web browser: Google Chrome.
- Screen resolution for full web views: 1200 × 800 pixels.
- Broadband internet connection required, throughput up to 6 Mbps.

Helvar Cloud Gateway

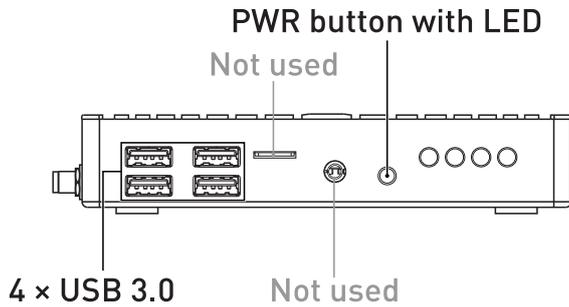


## Dimensions (mm)

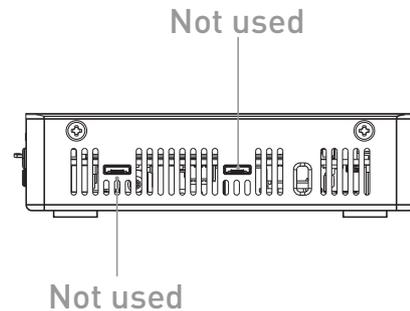


## Connections

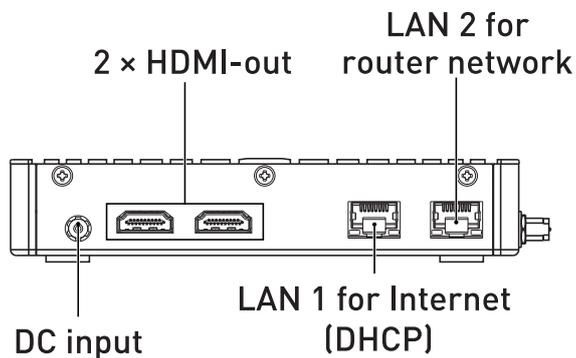
### Front panel



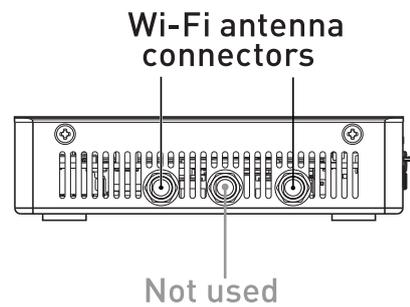
### Right panel



### Rear panel



### Left panel



## Technical Data

Electrical data	
Input voltage:	12 VDC – 19 VDC

Connectivity	
LAN 1:	10/100/1000 Mbps Intel I210 GbE. For router network.
LAN 2:	10/100/1000 Mbps Intel I210 GbE. For local computer network.
Wi-Fi:	2 x Wi-Fi antenna

I/O Interface	
HDMI:	2 x HDMI-out, max. resolution: 3840 x 2160 @ 30 Hz, 2560 x 1600 @ 60 Hz, 24 bpp
On/Off:	Power button with LED
USB interface:	4 x USB 3.0

Software compatibility	
Designer:	5.4.3 or later

Operating and storage conditions	
Ambient temperature:	0 °C to +40 °C
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	-20 °C to +60 °C

Mechanical data	
Dimensions:	140.8 mm x 107.5 mm x 28 mm
Mounting:	DIN rail (installation in switchgear / controlgear cabinet)
Weight:	560 g
IP rating:	IP20

Conformity and standards	
Conformity:	CE UK
EMC emission:	EN 55032
EMC immunity:	EN 55024
RED:	EN 301 489-1 EN 301 489-17
Safety:	EN 61347-2-11-1
Environment:	Complies with WEEE and RoHS directives.

## 2. TOSIBOX® Lock 150

The TOSIBOX® Lock 150 is a small-form-factor computer that provides an encrypted VPN connection to a lighting site's router system for remote Designer assistance.

Authorised users can use this VPN connection to resolve issues and to service lighting systems as needed.

The TOSIBOX® Lock 150 is a product of Tosibox Inc. For more information, visit [www.tosibox.com](http://www.tosibox.com).

24 VDC, 10 W DIN-rail power supply included.

Reliable Tosibox connection requires Designer and router version 5.4.3 or later.

TOSIBOX® Lock 150



## 3. TOSIBOX® Key 200

The TOSIBOX® Key 200 is the cryptoprocessing device that establishes the VPN connection between the PC running Designer and the TOSIBOX® Lock 150.

The TOSIBOX® Key 200 is a product of Tosibox Inc. For more information, visit [www.tosibox.com](http://www.tosibox.com).

TOSIBOX® Key 200



## Security

The information security of Tosibox products, services, and operations are officially audited.

The security audit was conducted by a global independent company according to the ISAE3000 Assurance Standard.

The controls and content of the audit were based on the ISO 27001:2013 Standard and the OpenSAMM Software Assurance Maturity Model.

A full security document is available.

TESTED  
& AUDITED

ACCORDING TO ISAE 3000



## Dimensions (mm)

