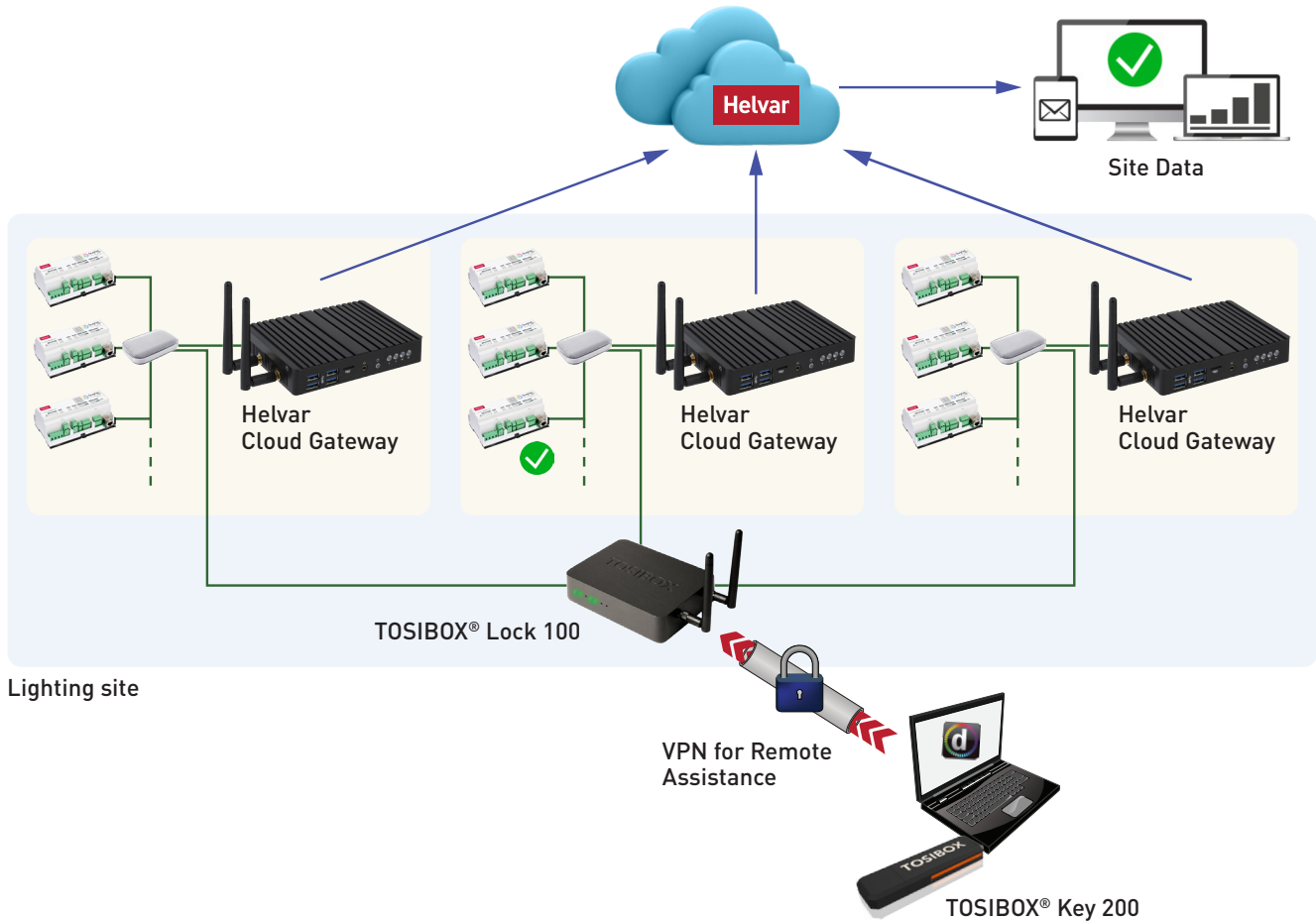# Service Kit

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 100, featured on page 4.
3. TOSIBOX® Key 200, featured on page 4.



Site Data

Helvar Cloud Gateway

Helvar Cloud Gateway

Helvar Cloud Gateway

TOSIBOX® Lock 100

Lighting site

VPN for Remote Assistance

TOSIBOX® Key 200

## Service Kit Options and Part Numbers

| Name | Part No. | Description |
| --- | --- | --- |
| Starter Kit | HCG1TBLK KIT | HCG + TOSIBOX® Lock 100 + TOSIBOX® Key 200 |
| Next Site Kit | HCG1TBL KIT | HCG + TOSIBOX® Lock 100 |
| 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.

**Helvar Cloud Gateway**

## 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.

## Dimensions (mm)

107.5

140.8

28
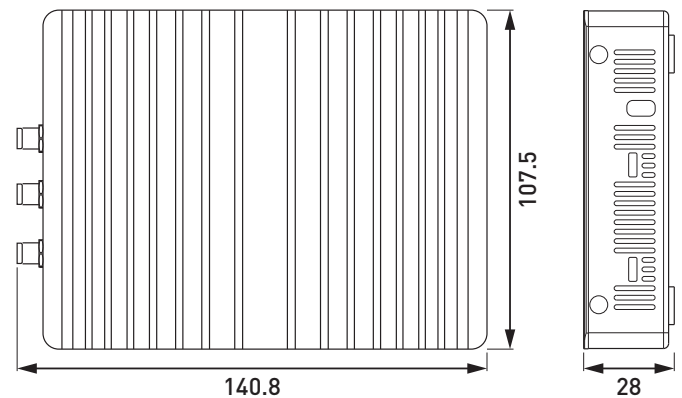
## Requirements

- 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.

# Technical Data

## Power

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.

Wi-Fi: 2 × Wi-Fi antenna

## I/O interface

HDMI: 2 × HDMI-out, max. resolution: 3840 × 2160 @ 30 Hz, 2560 × 1600 @ 60 Hz, 24 bpp

On/Off: Power button with LED

USB interface: 4 × USB 3.0

## Mechanical data

Dimensions: 140.8 mm × 107.5 mm × 28 mm

Mounting: DIN rail (installation in switchgear/controlgear cabinet)

Weight: 0.56 kg

IP code: IP20

## Operating and storage conditions

Ambient temperature: 0 °C to +40 °C

Relative humidity: Max. 90 %, noncondensing

Storage temperature: −20 °C to +60 °C

## Conformity and standards
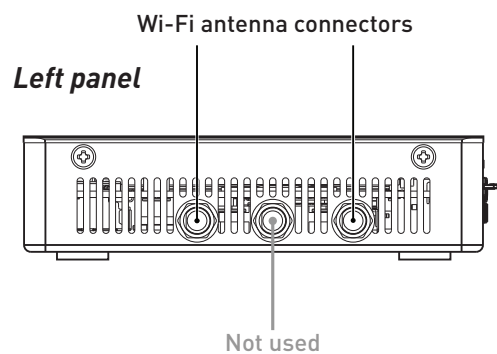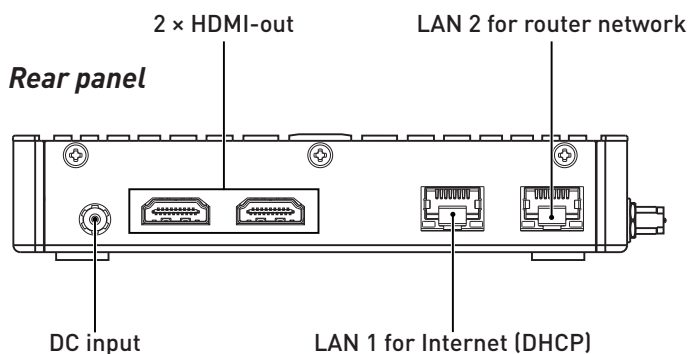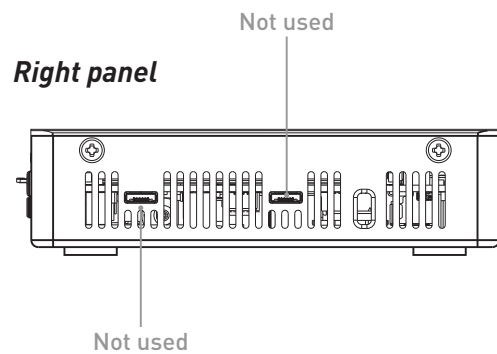
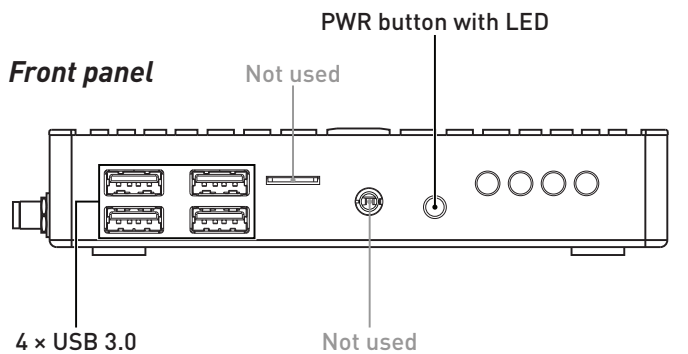EMC: EN 55032
EN 55024

RED: EN 301489-1
EN 301489-17

Safety: EN 60950-1

Environment: Complies with WEEE and RoHS directives.

## Software compatibility

Designer: 5.4.3 or later

## Connections

**Front panel**

PWR button with LED

Not used

Not used

4 × USB 3.0

**Right panel**

Not used

Not used

**Rear panel**

2 × HDMI-out

LAN 2 for router network

DC input

LAN 1 for Internet (DHCP)

**Left panel**

Wi-Fi antenna connectors

Not used

## 2. TOSIBOX® Lock 100

The TOSIBOX® Lock 100 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 100 is a product of Tosibox Inc. For more information, visit 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 100

## 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 100.

The TOSIBOX® Key 200 is a product of Tosibox Inc. For more information, visit www.tosibox.com.

TOSIBOX® Key 200

## Security

The information security of Tosibox products, services, and operations are officially audited.
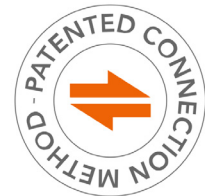
The security audit was conducted by a global independent company according to the ISAE3000 Assurance Standard.

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

PATENTED CONNECTION METHOD

## Dimensions (mm)

132.2

99.2

21.5    9

66    78