

freeDim Master (FD-1101)

This wireless controller is the central element in Helvar's freeDim lighting solution, which provides personalised lighting control.

The unit is controlled by an app installed on a Bluetooth®-enabled device, such as a tablet or a smartphone.

freeDim Master can be connected wirelessly with up to 10 freeDim Follower units, each of which is capable of controlling compliant DALI load devices.

The unit uses the information provided by freeDim Sense to intelligently control lighting levels and reduce energy usage.

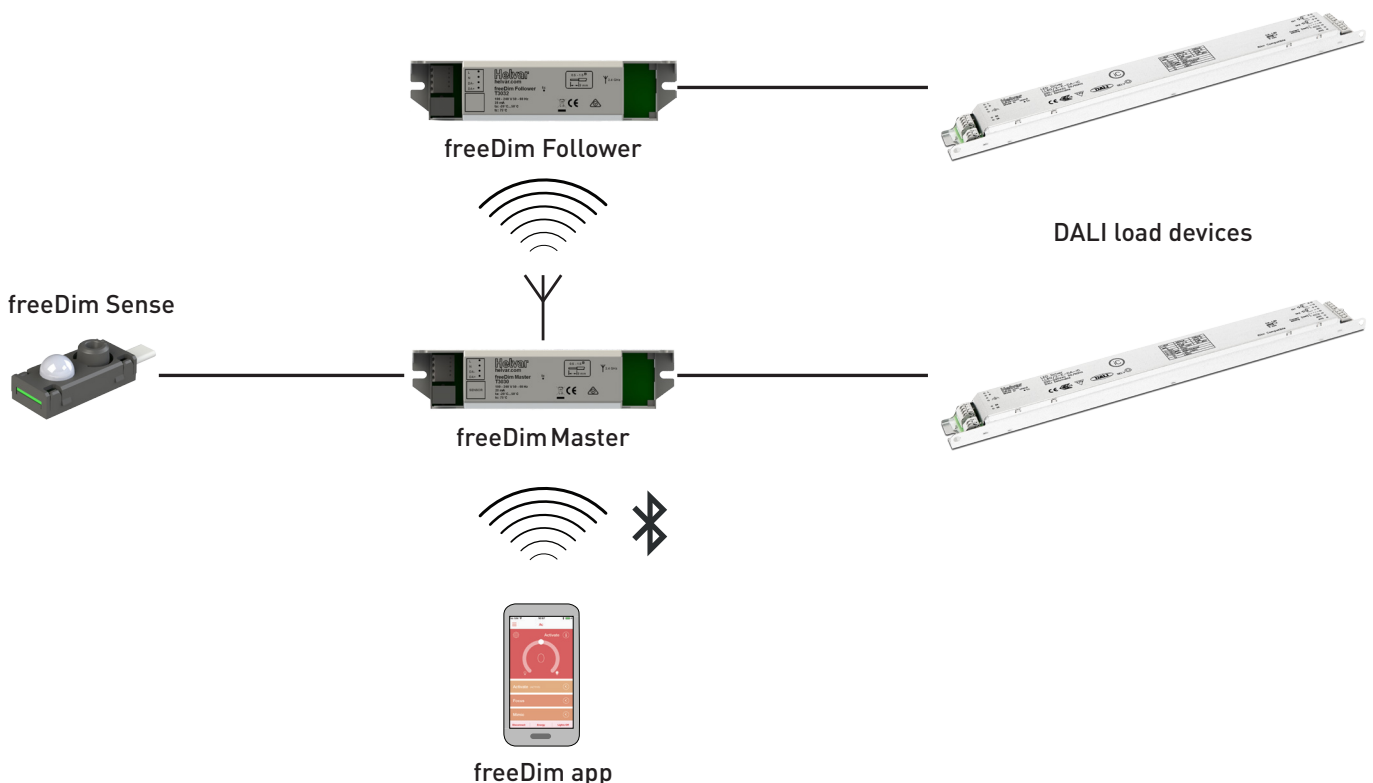
freeDim Master operates as follows:

- The freeDim app connects to the master via Bluetooth® wireless technology and enables communication with a DALI ballast or an LED driver. This DALI device adjusts the lighting to the required intensity and colour-temperature.
- It receives light-level and occupancy information from freeDim Sense and sends the appropriate commands to the DALI device in order to reduce energy usage and provide the right lighting at the right time.
- It forwards the relevant commands to any freeDim Follower wirelessly connected to the master.
- It stores the user profiles created with freeDim app.



Key Features

- Improved lighting control using DALI Type 8 protocol (colour temperature).
- Capable of increased energy savings through daylight harvesting and presence detection.
- Provides various dynamic lighting sequences and scenes.
- User-defined profiles stored in the unit.
- Four predefined scenes and two user-defined scenes.
- Changes intensity and colour temperature over the time of day (circadian rhythm).
- Smart setup and control by the freeDim app supported on Bluetooth®-enabled devices.



Bluetooth® is a registered trademark of Bluetooth SIG, Inc

Technical Data

Electrical data

Mains (L/N) :	100 VAC – 240 VAC (nominal), 50 Hz – 60 Hz, 28 mA max.
DALI (DA+, DA-) :	Max. 8 mA supply (basic insulated, use mains-rated cabling). Suitable for controlling up to 4 devices.
Cable (mains and DALI):	Mains rated, 0.5 mm ² – 1.5 mm ² solid, stripped, 8 mm – 9 mm

Mechanical data

Case:	Nonflammable ABS Blend (UL94-V0)
Dimensions:	147 mm × 35 mm × 22 mm
Weight:	250 g

Power ratio and frequency

802.15.4 wireless:	Integral antenna –2 dBm max. at 2.4 GHz, channels 15 and 25
Bluetooth® wireless technology:	Integral antenna –8 dBm max. at 2.4 GHz, advertising channels 37, 38 and 39

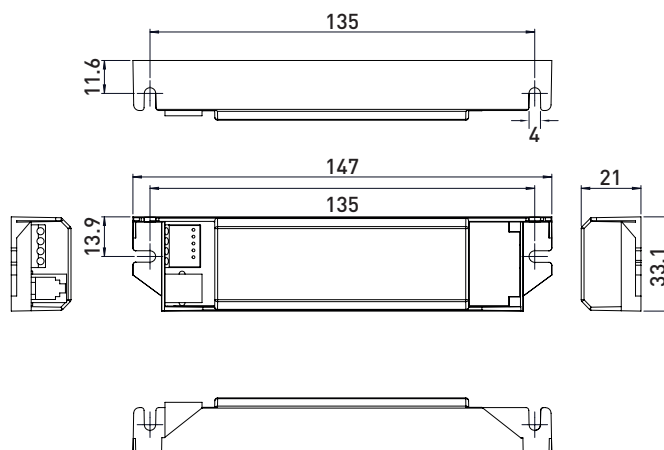
Operating and storage conditions

Operating temperature:	0 °C to +50 °C
Storage temperature:	–40 °C to +80 °C
Relative humidity:	90 % max., noncondensing
t _c	+75 °C

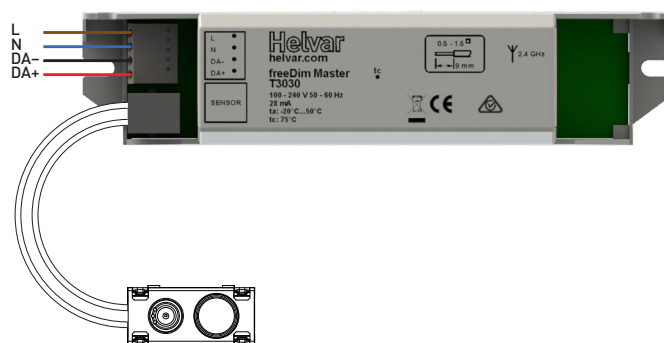
Conformity and standards

DALI standards:	IEC 62386-101 IEC 62386-209
EMC emissions:	EN 301489-1 EN 301489-17 EN 55015
EMC immunity:	EN 61547
R&TTE directive:	EN 300328
Safety:	EN 61347-2-11
Environment:	Complies with WEEE and RoHS directives.

Dimensions (mm)



Connections



freeDim Master with freeDim Sense