

M-DIM-2s: Dimmer module with two outputs

Document number: PO-043-EN Version: 1.0.0 Date of publication: February 23, 2022



Technical data

Supply voltage
11 – 16V DC

Current consumption
80mA

Controlled outputs
2

Technical data cont.

Maximum load of a single output
150W/300W

Minimum dimmer voltage
48V AC

Maximum dimmer voltage
250V AC

Dimensions

Width
35mm, 2 spaces/modules in DB

Height (incl. plugs)
110mm

Depth
59mm

Environment

Temperature
-40 – 50°C

Humidity
≤95%RH, non-condensing

The image above is for illustration purpose only. The actual module may vary from the one presented here.

General features

Module M-DIM-2s is a component of the Ampio system. Required voltage to power the module is 11 – 16V DC. The module is controlled via CAN bus.

The module has two dimmable outputs. In the standard version of the module, the maximum power of the receiver connected to a single output is 150W. The module is also available in an extended version, allowing to load a single output with a receiver of 300W.

Dimmable outputs

With the use of the module, it is possible to control the light intensity of incandescent bulbs, halogens, dimmable LED bulbs and dimmable CFL fluorescent lamps. It is possible to control light sources powered through a transformer.

Light sources powered through a transformer

In the case of controlling light sources powered through a transformer, the device must be configured to disconnect the power supply when detecting a trailing edge.

The maximum power of the receiver connected to the dimmable output is 150W. The input voltage ranging from 48V AC to 250V AC can be smoothly regulated.

Dimmable outputs have short-circuit, overload and thermal protection. The module facilitates power measurement.

Extended version

The M-DIM-2s module is also available in an extended version, the outputs of which are capable of handling loads of 300W. The extended version is available on request.

Typical application

- Switching on the lighting;
- smooth lighting control;
- smooth power control of AC devices of a resistive nature and a maximum power not exceeding 150W/300W.

Installation

The module is designed for mounting on a 35mm DIN rail. The module's width is 35mm, 2 spaces/modules in DB. In order to start the module, it must be connected to the CAN bus. The bus of the Ampio system consists of four wires - two for power and two for communication between the modules.

In addition to the CAN bus interface, the device has a connector for mains voltage and dimmable outputs.

Device status LEDs

On the front of the module there are signalling LED indicators. The green LED with the label *CAN* indicates the status of communication on the CAN bus:

- one regular flash every 1 sec. – CAN bus communication is working properly,
- two regular flashes every 1 sec. – the module is not receiving information from other modules,
- three regular flashes every 1 sec. – the module cannot send information to the CAN bus;

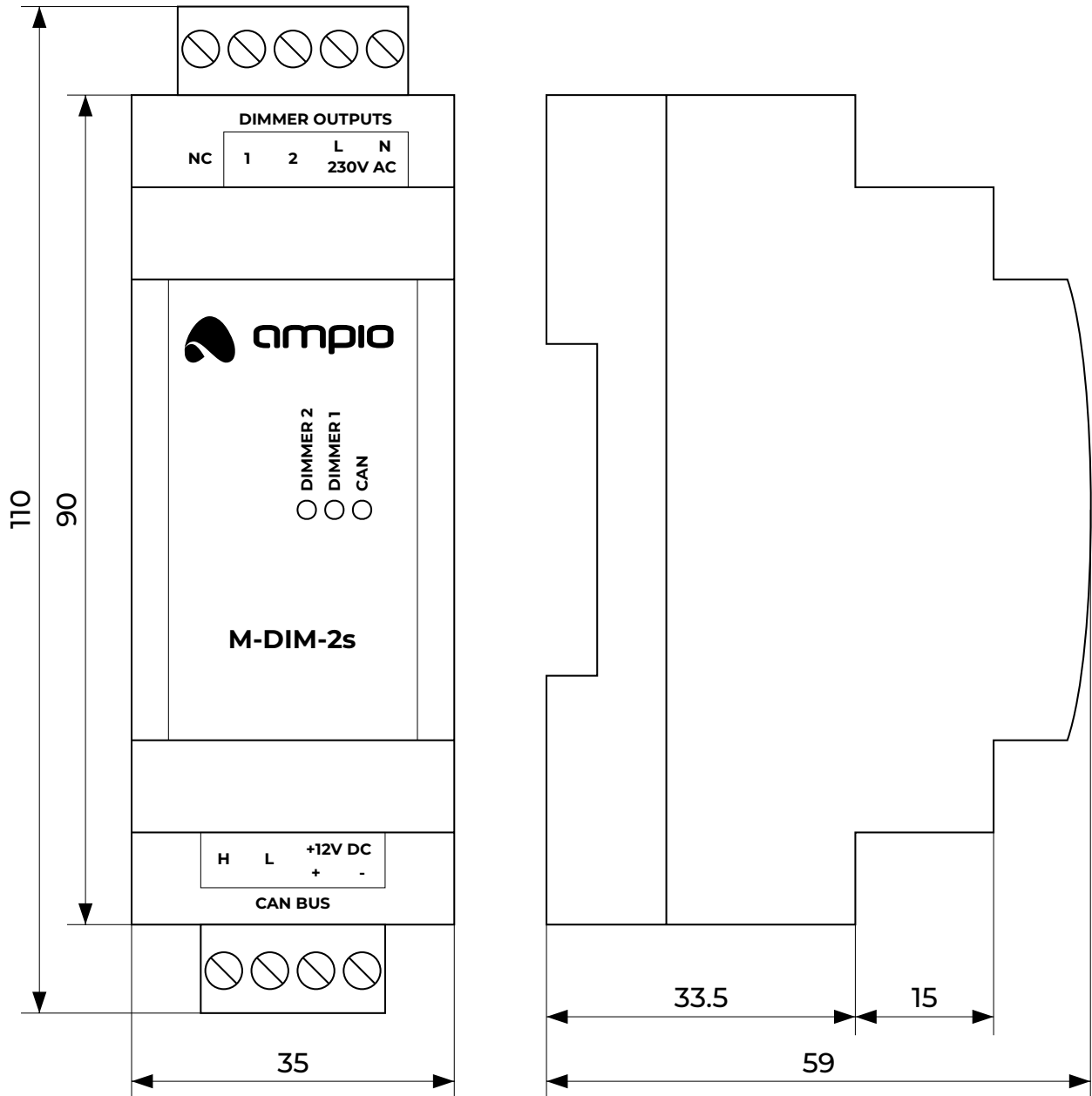
Apart from the communication bus status LED, on the front of the device there are two LEDs labelled *DIMMER 1* and *DIMMER 2*. They indicate the status of the respective dimmable outputs.

Programming

The module is programmed with the use of the [Ampio Designer](#) software. It allows you to modify the parameters of the module and define its behaviour in response to signals directly available to the module as well as general information coming from all devices present in the home automation bus.

Module dimensions

Dimensions expressed in millimeters.



Connection diagram

