

# M-OC-32s: Module with thirty-two bi-state OC outputs

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## Technical data

**Supply voltage**  
11 – 16V DC

**Current consumption**  
20mA

**Number of OC outputs**  
32

## Technical data cont.

**Maximum current of a single OC output**  
1A

**Maximum total current of all OC outputs**  
32A

**Maximum switched load voltage**  
40V

## Dimensions

**Width**  
105mm, 8 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-OC-32s 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 thirty-two two-state OC outputs.

## Bi-state OC outputs

The module has open-collector outputs allowing for switching of resistive loads supplied with voltage up to 40V DC. It is also allowed to control loads of moderate inductive nature, in particular, relays. Internally, each of the outputs allows the connected line to be short-circuited to the module's ground.

Unlike the OC outputs found in most modules from the Ampio offer, the outputs of the M-OC-32s module do not allow for smooth control - it is only possible to switch individual outputs on and off.

## Typical application

- Control of resistive loads supplied with voltages up to 40V DC, e.g.:
  - LED lighting,
  - piezoelectric buzzers,
  - heating mats;
- control of relays.

## Installation

The module is designed for mounting on a 35mm DIN rail. The module's width is 105mm, 8 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 connector, the device has a connector that allows for the connection of thirty-two resistive loads to open-collector outputs.

When using the open-collector outputs functionality, it should be borne in mind that the supply circuits of the connected loads are closed by the mass of the module. Therefore, it should be ensured that the mass of the device is connected to the mass of the power supply with a cable of appropriate thickness.

If the current consumed by all loads connected to the open-collector output is lower than 16A, it is sufficient to connect one ground terminal to the external power supply. **With two terminals connected, the maximum current is 32A.**

## 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:

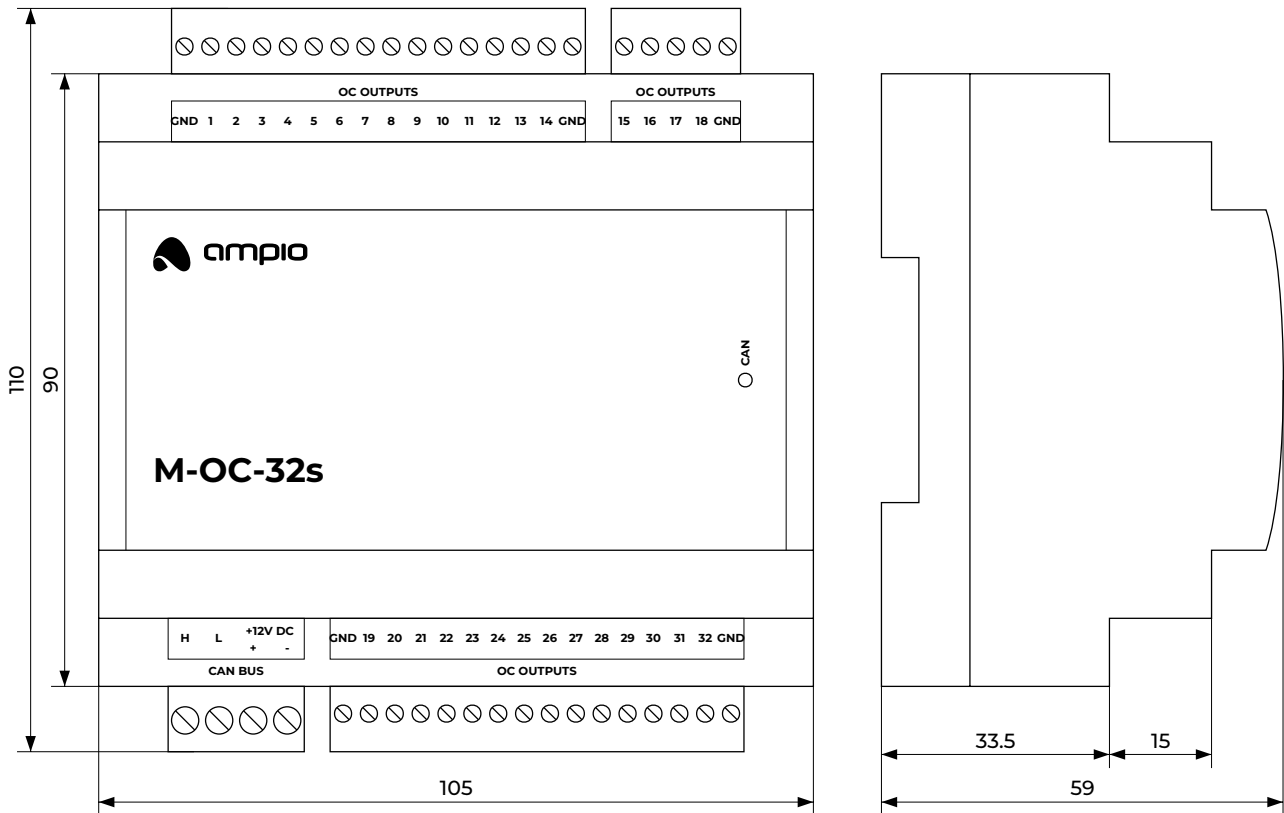
- one regular flash every 1 sec. – CAN bus communication is working properly,
- two regular flashes every 1 sec. – the module is not receiving information from other modules,
- three regular flashes every 1 sec. – the module cannot send information to the CAN bus;

## 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

The presented power supply of OC outputs controlled devices is for reference only. The module can control loads with a supply voltage up to 40V DC.

