M-CON-WL-p: Ampio LoRa base station module

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Technical data	Dimensions	Environment
Supply voltage 11 — 16V DC	**Width** 41mm	**Temperature** -40 — 50°C
Idle current consumption 35mA	**Height** 44mm	**Humidity** ≤95%RH, non-condensing
Maximum current consumption 100mA	**Depth** 16.5mm	
Communication interface LoRa		

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

General features

Module M-CON-WL-p 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 acts as a base station for wireless modules that communicate using the Ampio LoRa technology

> Only one M-CON-WL-p module can be present in an Ampio building automation installation.

Ampio LoRa base station

The device acts as a base station for the Ampio devices from the WL group that communicate via the Ampio LoRa wireless interface. As a base station, the device distributes information between wireless modules and other building automation devices.

As part of installation activities, each Ampio LoRa device must be paired with a module that acts as a base station. To do this, use the Smart Home CAN configurator software to enter the M-CON-WL-p module into a search mode for modules from the WL group. When the search mode is active, press the pairing button on the wireless module that you are trying to pair three times. If the operation is successful, the found device will appear on the list of paired wireless modules within the Smart Home CAN configurator software.

Typical application

- Connection of Ampio devices from the WL group communicating via the Ampio LoRa wireless interface with the wired part of the building automation installation.

Installation

The dimensions of the module enable its installation in a standard junction box. 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.

A cable, which constitutes an antenna, is led out of the casing of the device.

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Device status LEDs

On the front of the module there are signalling LED indicators. The redl 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;
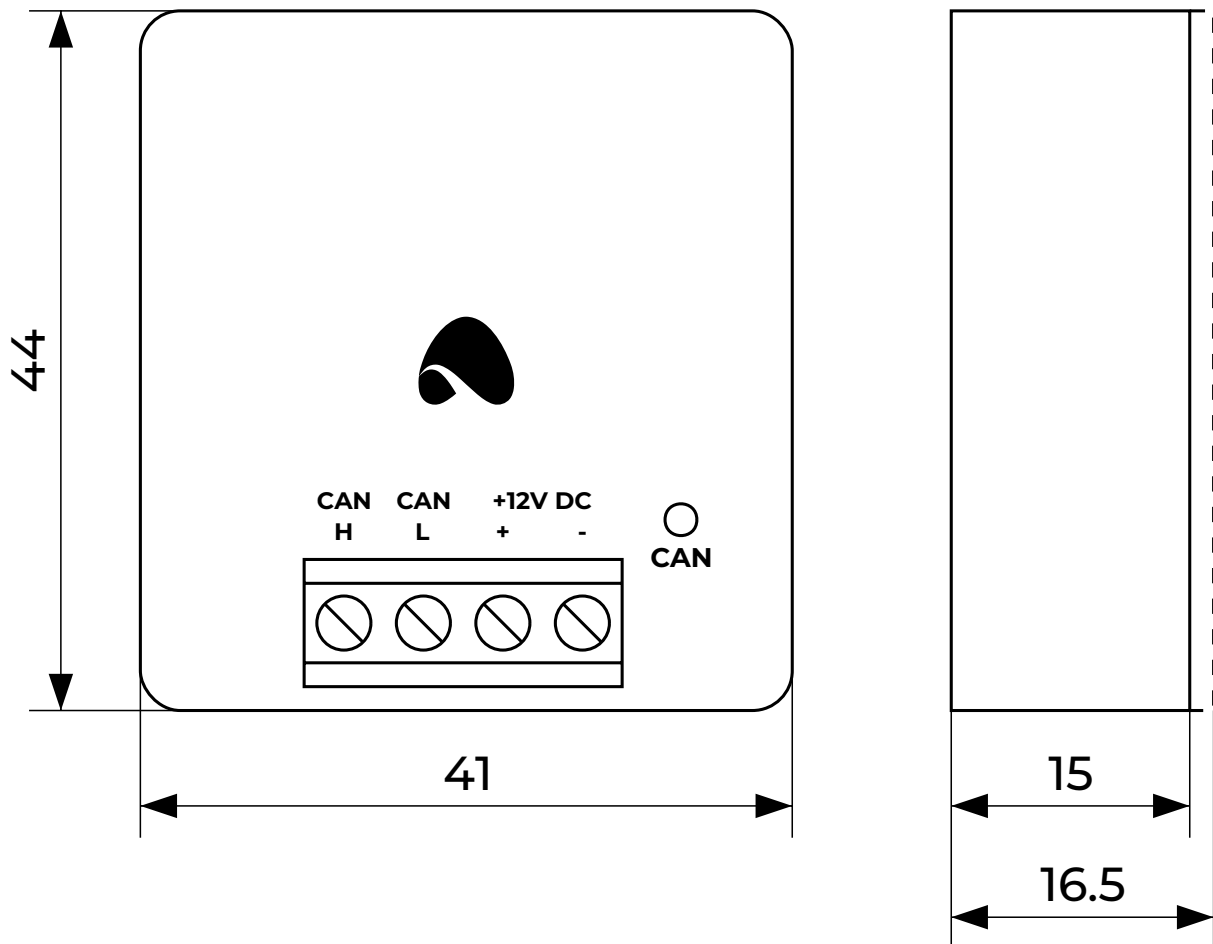
Programming

The module is programmed with a special programmer, available for authorised technicians, and the Ampio Smart Home CAN configurator 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.

> It is not recommended to use more than 8 Ampio LoRa wireless modules per one base station module. Installing more modules may result in excessive load on the wireless network and improper functioning of the system.

Module dimensions

Dimensions expressed in millimeters.

The dashed lines mark the areas where the device connectors or its other elements can be located.

Connection diagram