

Installation Guide

Allegro Network Multimeter 1400, 3400 and 5400

Default Settings

LAN:	DHCP client	Wi-Fi WPA2 key:	Allegro-MM
Wi-Fi SSID:	allegro-mm-(see top label)	Web interface user name:	admin
Wi-Fi URL:	https://allegro/ or https://192.168.4.1	Web interface password:	allegro

Overview

The guide contains the following sections:

1. Package contents
2. Hardware deployment
3. Device start
4. Management interface configuration
5. Configuration reset
6. Firmware update notification
7. Factory reset
8. Manual

1. Package Contents

The Allegro Network Multimeter package contains the following items:

1 x Allegro Network Multimeter 1400, 3400 or 5400 incl. redundant power supply unit	1 x Screw set for HDDs
2x Power cable	1 x Screw set for rack rail set
1 x Rack rail set	12 x 3.5" HDD mounting frame
1 x Wi-Fi USB adapter (already pre-installed)	1 x Installation guide
	1 x Front bezel



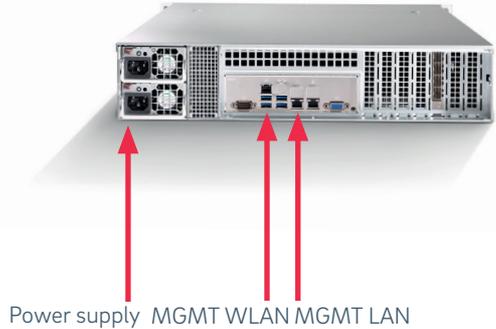
2. Hardware Deployment

2.1. Management Access (Control Plane)

Step 1: Connect power supply

Step 2: Connect management LAN

Alternative: Insert Wi-Fi adapter to any of the USB ports



By default, for LAN, the device will query an IP address via DHCP dynamically from your network. By default, for Wi-Fi, the device will open an Access Point so smartphones, tablets, or laptops can connect to the Access Point and access the web interface.

In case Wi-Fi access is not possible and no DHCP server exists, a temporary IP address can be assigned by using a USB keyboard and pressing 'Shift+S'. The LAN IP interface is temporarily set to 192.168.0.1. If this is already taken, another address in the range from 192.168.0.1 to 192.168.0.10 will be used.

You can check the assigned IP address on a connected monitor.

2.2. Network Measurement Installation (Data Plane)

The x400 Series, consisting of the Allegro 1400, 3400 and 5400, analyzes all data traffic transmitted through all network interfaces of the built-in measurement cards. The Allegro Network Multimeter can be equipped with up to 7 network cards with 2 or 4 ports each. The appliance can be used in the following configurations:

2.2.1. Bridge Mode

Each 2 adjacent ports of a network card form a Layer 2 bridge, which forwards all incoming data traffic to the respective other partner port.

WARNING: Bridge mode is a software-only TAP and will not work in case of a device error or after power off.

2.2.2. Sink Mode

Received packets will be processed but not forwarded. Connect the Allegro Network Multimeter to a hardware TAP by connecting both TAP interfaces to the device. Alternatively, a switch or router mirror port can be connected to any of the device network interfaces.

Default configuration is bridge mode, thus running as an inline device. The link mode can be configured via a web interface (menu 'Settings' → 'Global settings'):

The screenshot displays the 'Global settings' web interface. On the left, a navigation sidebar lists various settings categories, with 'Settings' expanded to show 'Global settings', 'Module settings', 'Incident settings', and 'User defined names'. The main content area is titled 'Global settings' and includes a 'Manual' button. Below the title, there are tabs for 'Generic settings', 'IPFIX settings', 'Time settings', 'Email notification', and 'Expert settings'. The 'Generic settings' tab is selected, showing the 'Packet processing mode' section. This section includes a 'Mode:' dropdown menu currently set to 'Bridge mode'. Below the dropdown, the 'Available modes:' are listed: 'Bridge mode: pairwise receive and transmit packets for operation in-line' and 'Sink mode: only receive packets on all interfaces, for operation behind a network tap, or on a mirror port of a switch'.

2.3 Installing your own HDDs

The Allegro x400 can be used with up to 12 x 3.5" SATA/SAS HDDs. These must be installed in the mounting frame.

3. Device Start

1. Press the power button at the front of the device. The device will boot within two minutes.
2. LAN access: The device gets its IP from the DHCP server in your network. Check the console output on an attached monitor or ask the server administrator for the IP of the device, then enter the IP into the URL bar of your web browser.
3. Wi-Fi access:
 - SSID: allegro-mm-xxxx (individual per device)
 - WPA2 password: Allegro-MM
 - Enter <https://allegro/> or <https://192.168.4.1/> into the URL bar of a browser.
4. Web interface authentication:
 - User name: admin
 - Password: allegro

4. Management Interface Configuration

You can configure the management interfaces by accessing the web interface at 'Settings' → 'Management interface settings'. The available options are described in the Product Wiki which can be accessed via the web interface.

Alternatively, with a keyboard and VGA monitor connected, you can change the setting on the console by pressing Shift-C and following the menu guidance.

5. Configuration Reset

The 'Configuration reset' restores the configuration to the default settings:

1. Web interface: Go to menu 'Settings' → 'Administration' and click on 'Reset system configuration'. All settings including the network configuration will be reset to factory default.
2. Boot menu: Follow the instruction in the section 7. Factory Reset.

6. Firmware Update Notification

Update information via email

With each release, Allegro Packets will send you an email with release notes and a link to download the update. If you want to be added to this mailing list, please contact us: allegro-packets.com/support.

Using the Allegro web interface

Start your Allegro Network Multimeter and click 'Settings' on the left side of the menu and then 'Firmware updates'. Click on 'Check for new firmware' and the Allegro Network Multimeter will tell you if a new version is available for download. If so, you can choose to download it directly to the device. In addition, this page provides an overview of all versions available to you. To start the new version, click on 'Activate'.

7. Factory Reset

The 'Factory reset' will clear the entire system installation and restore the firmware to the version that was originally shipped with the Allegro Network Multimeter.

1. Power off the Allegro 1400, 3400 or 5400.
2. Remove all network cables from the device.
3. Connect a display to the VGA port.
4. Connect a USB keyboard to any of the four USB ports.
5. Power on the device by pressing the power button.
6. After initialization a boot menu appears. Select 'Factory reset' and press Enter. Or select 'Configuration reset' to reset the configuration settings only while keeping the current firmware installation.
7. The device will boot, reset everything to factory settings, and reboot again.
8. The device is now reset to factory settings.
9. Disconnect the display and keyboard.

8. Manual

The device manual can be accessed from the web interface. Each web section contains a button to access context-specific documentation, the complete manual can be opened by clicking on the 'Manual' link in the menu.

Getting Help:

If you have any questions regarding the Allegro Network Multimeter, please feel free to contact us: allegro-packet.com/support.

You can find more information and details via the allegro-packets.com/wiki.