

Allegro Packets

Network Multimeter



Allegro Network Multimeter

1010 / 3010

Analysis and Troubleshooting Tool for Network Administrators

- ✓ Unrivalled troubleshooting & forensic analysis efficiency
- ✓ Ultra-scalable connectivity from 1 – 400 Gbit/s
- ✓ Real-time connection-level insight up to 20 Gbit/s
- ✓ Packet capturing with HW-timestamping up to 40 Gbit/s
- ✓ No-wait layer 2-7 navigating, filtering, correlating
- ✓ 1-click ultrafast pcap extraction of prefiltered packets of interest
- ✓ 100 % engineered and developed in Germany

Designed for Portable Network Analysis Needs

The Allegro 1010 and 3010 are optimized for the analysis, monitoring, verification and troubleshooting of network connections spanning from 1 G to 25 G. Weighing less than 3 kg and accompanied by a portable carrying case, these Allegro Network Multimeters make the perfect addition to network administrators and field engineers working in data centers, core networks and even robust ISP infrastructures.

Real-Time Visibility and In-Depth Statistics for all Connections

Empowered by Allegro Packets' intuitive web-interface, the Allegro 1010 and 3010 provide granular visibility and selective packet filtering across L2 to L7. Analysis can be performed in real-time and back-in-time for a complete view of the network. The GUI offers several comprehensive overviews as well as detailed statistics on network quality, IPs, MACs, VLANs, Multicast, QoS, TCP, TLS, RTP, Profinet, VoIP, HTTP and many more. With quick and easy set-up, the Allegro Network Multimeter is ready for immediate use to find the root cause of a problem in your network.

Traffic Recorder and Back-in-Time Playback

Featuring back-in-time capability, the Allegro 1010 and 3010 facilitate precise selection and extraction of recorded data. Such pre-filtered pcap data can be effortlessly extracted with a simple click. Furthermore, selected data can be individually reimported into the network, enabling the recreation and replay of specific events or security incidents, e.g. with IDS / IPS systems.

Expandable Ethernet Ports, In-Memory Database and Ring Buffer

Designed to adapt to your network's unique needs, the Allegro 1010 and 3010 can be customized with additional capture port connections and storage options. Each device comes equipped with 2 x SFP28 ports with HW-based timestamping for 1 / 10 / 25 G links, and 3 x 10 / 100 / 1000Base-T ports. By adding a network extension card in the available slot, the number of ports can be increased by 4, with options ranging from 1 to 400 GbE Cu / SFP+ / SFP28 / QSFP / QSFP28 / QSFP56 / OSFP ports. The In-Memory database for processing historical data starts at 16 GB in the Allegro 1010 and 64 GB in the Allegro 3010. This can be extended up to 256 GB. The ring buffer, crucial for recording network traffic across multiple links, may be dynamically expanded with up to 1 x M.2 and up to 1 x HDD/SSD drive.



Table 1 Allegro 1010 / 3010 Specifications

Feature	Allegro 1010 / 3010
Size (W / H / D) in mm	254 x 43 x 226
Weight	2 kg
Internal database memory	1010: 16 GB default 3010: 64 GB default Expandable up to 256 GB as option
Built-in packet ring buffer storage	Optional from 1 TB up to 29.6 TB Fits up to 1 x M.2 and 1 x HDD, U.2 SSD, or SATA SSD (blocks network extension slot)
Built-in capture ports	2 x SFP28 with HW-based timestamping 3 x 10 / 100 / 1000Base-T 1 x WiFi 6e USB adapter ¹ 2 x USB3
Capture port extension options ²	1 extension slot for network extension card
Management ports	1 x 10 / 100 / 1000Base-T 1 x WiFi 802.11n via USB adapter 1 x 1000Base-T IP KVM remote management

Performance	A1010	A3010
Max. capture rate (capture only) ³	20 Gbit/s	40 Gbit/s
Average throughput (full decode) ³	10 Gbit/s	20 Gbit/s
Average packets per second (capture only / full decode) ³	4 Mpps / 1.2 Mpps	4 Mpps / 4 Mpps
New connections per second ³	16,000	30,000



Max. parallel connections ³	1 million
Jumbo frames	At least 9,000 Bytes
Power consumption	1010: typical 60 W / max. 150 W 3010: typical 100 W / max. 150 W
Packaging	Portable soft shell case
Rack kit	1U rack kit included
Operating temperature and humidity	10° C to 40° C (50° F to 104° F) 8% to 90% (non-condensing)
Non-operating temperature and humidity	-40° C to 70° C (-40° F to 158° F) 5% to 95% (non-condensing)
Warranty support	1 year included, extension options available

Table 2 Memory Extension Options

If you need to view more historical data, you can upgrade the In-Memory database of the Allegro Network Multimeter. The Allegro 1010 comes with 16 GB of memory, while the Allegro 3010 has 64 GB of memory included by default. This can be expanded up to 256 GB.

Order ID	Product Description
Ax010-64GB	Memory extension upgrade to 64 GB for A1010
Ax010-128GB	Memory extension upgrade to 128 GB
Ax010-256GB	Memory extension upgrade to 256 GB

Table 3 Options for Internal Storage Extension

The internal storage acts as a packet ring buffer for the entire link or its selected traffic. This allows the extraction of historical packets. The Allegro 1010 and 3010 can fit up to 1 x M.2 SSD and up to 1 HDD, U.2 SSD or SATA SSD. The addition of the HDD, U.2 SSD or SATA SSD blocks the network extension slot, while the M.2 SSD does not. A USB3 disk can be used as storage if the network extension slot is blocked by a port extension card.²

Order ID	Product Description
Ax010-1TBHDD	1 TB 2.5" HDD, up to 700 Mbit/s full packet capturing, blocks extension slot
Ax010-2TBSSD	2 TB M.2 SSD, up to 10 Gbit/s full packet capturing, guarantee for 3,600 TB written data, does not block extension slot
Ax010-4TBSSD	4 TB M.2 SSD, up to 10 Gbit/s full packet capturing, guarantee for 5,100 TB written data, does not block extension slot
Ax010-6.4TBSSD	6.4 TB U.2 SSD, up to 40 Gbit/s full packet capturing, guarantee for 37,300 TB written data, blocks extension slot
Ax010-12.8TBSSD	12.8 TB U.2 SSD, up to 40 Gbit/s full packet capturing, guarantee for 74,700 TB written data, blocks extension slot
Ax010-25.6TBSSD	25.6 TB U.2 SSD, up to 40 Gbit/s full packet capturing, guarantee for 149,400 TB written data, blocks extension slot
Ax010-8TBSSD	8 TB 2.5" SATA SSD, sustained 1 Gbit/s full packet capturing (up to 4 Gbit/s for ~150 seconds), guarantee for 2,800 TB written data, blocks extension slot

¹ Up to 16 WiFi adapters can be added with USB hub.

² Reference Port Extensions Datasheet for the latest options and specifications.

³ Real-world datacenter throughput scenario.