

SierraNet™ 100GbE Layer-1 Link Negotiation Adapter

IEEE 802.3ck 100Gb Ethernet Protocol PAM4
Adaptive Test Module for M648 Platforms



Key Features

- Self-Contained, Modular unit with USB-C power adapter
- Integrated QSFP-DD probe and pass-through connection
- Single Lane, 100GbE IEEE802.3ck Auto-Negotiation and Link Training Capture
- Two 100G adapters may be used for simultaneous use (100GbE x 2-links).
- Optical or copper cable connections supported
- SFP-56 connection back to SierraNet M648 platform
- Operational License included with adapter
- Requires SierraNet M648 with PAM4 Ethernet analysis license

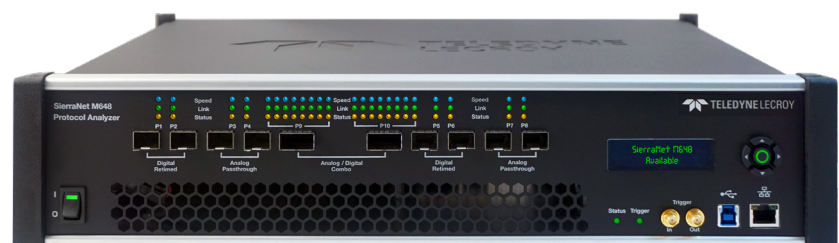
The SierraNet 100GbE L1 Link Negotiation Adapter module and license enables the SierraNet M648 Ethernet protocol analyzers to capture and analyze the link negotiation characteristics of new IEEE 802.3ck 100GbE DUTs. These modules extend the investment of the SierraNet M648 PAM4 GbE testing platform and offer Teledyne LeCroy's best in class signal probing solution.

The SierraNet 100GbE L1 Link Negotiation Adapter are designed to support the protocol observation requirements of physical layer engineering teams. The SierraNet 100GbE L1 Link Negotiation Adapter supports examination of a single link of 100Gb Ethernet. The module ships with the required License Key enablement and is operated via the Net Protocol Suite™ software application.

The SierraNet 100GbE L1 Link Negotiation Adapter will supply engineers 100% recording capabilities for the Ethernet Auto-Negotiation and Link Training sequences, with accurate and precise decoding enabled in the Net Protocol Suite™ software application.

The SierraNet 100GbE L1 Link Negotiation Adapter will connect to the link under test via a remote probe (QSFP-DD based) and then to the M648 via a pair of SFP-56 cables. The adapter connection is made to the SierraNet M648 via the Analog Pass Through SFP ports.

As is the case with existing SierraNet platforms, when used with the SierraNet 100GbE L1 Link Negotiation Adapter, they may be connected via the CrossSync™ application to other Teledyne LeCroy protocol tools to observe traffic across multiple connections to understand how traffic, stimulus, or errors propagate across bridges or adapters.



SierraNet M648 Protocol Analyzer

The Net Protocol Suite™ software application provides the most advanced triggering and filtering state machines available. Up to 24 states, with four transitions per state, and multiple trigger, filter, and timer conditions per capture project are standard features. Advanced triggering enables state specific filtering to eliminate the capture of unwanted traffic, providing users intuitive and easy navigation to the information and events of importance.

Specifications	
Host Machine Minimum Requirements	Microsoft® Windows 11®, Windows 10, Windows Server 2019, Windows Server 2016; 2 GB of RAM; Storage with at least 4 GB of free space for the installation of the software and additional space for recorded data; display with resolution of at least 1024x768 with at least 16-bit color depth; USB 2.0 port and/or 100/1000 Mbps Ethernet network interface. For optimal performance, please refer to our recommended configuration in the product documentation.
Data Rates Supported	PAM4 IEEE 802.3ck 100Gbps Ethernet
Recording Memory Size	Maximum supported by accompanying SierraNet M648 based analyzer platform
Host System Interface	Not Applicable
Front Panel Indicators/Connections	Power LED Two (2) SFP-56 receptacles, one (1) QSFP-DD receptacle
Rear Panel Connectors	USB Power, QSFP
Included Accessories	USB A to C cable, 2ea 0.5m SFP DAC cable
Cascade and Expansion Capability	Up to 2 100GbE L1 Modules per SierraNet System
Dimensions (H x W x D)	Chassis: 27 x 82 x 188 mm (1.08" x 3.2" x 7.4")
Weight	0.36 Kg (0.8lb)
Power Requirements	5VDC, 2A via USB Type C cable (included)
Environmental Requirements	Operating: 0 to 50C (32 to 122F) Non-operating: -20 to 80C (-4 to 176F) Humidity: 10 to 90% RH (non-condensing)

Ordering Information

Base Hardware Platform

SierraNet T100-100GbE Layer 1 Adapter for M648, Single Lane Auto-Negotiation and Link Training Analyzer for IEEE802.3ck use (Requires SierraNet M648 Platform.)

Product Code

HSF-TPL1-100-X

Includes license for operation and use with the SierraNet M648



Local sales offices are located throughout the world.
Visit our website to find the most convenient location.

1-800-5-LeCroy • teledynelecroy.com



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