Finisar

Gigabit Ethernet

GT Gigabit Traffic Check

Low-Cost Gigabit Ethernet Link Monitor

Monitor Mode

- Measures link traffic in Mbytes and Kframes per second
- Reports frame payload size mix
- **Captures link errors**
- **Retimes data to minimize error** rate
- Converts media between copper and optical with GBIC interfaces

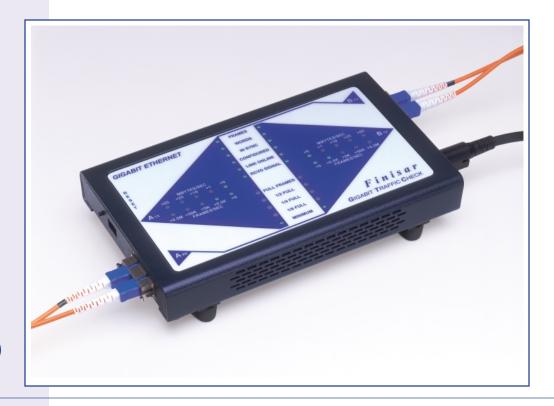
Test Mode

- **Generates Gigabit Ethernet data**
- **Tests cables**
- Measures cable length

he new Gigabit Traffic Check (GT-C) from Finisar quickly and accurately reports on a wide range of status parameters, error conditions, and performance measures. The GT-C continuously monitors both directions of a Gigabit Ethernet link and displays its traffic dynamics on a multicolor display. It can even report network problems you never knew you had!

Finisar products are well known throughout the industry for their superior quality, reliability, and affordability. The low-cost GT-C can make the sophisticated measurements that previously required bulky and expensive test equipment. It is the perfect alternative to costly network analyzers.

Contact factory for information on private labeling units for sale with second-party equipment.



Also available for Fibre Channel

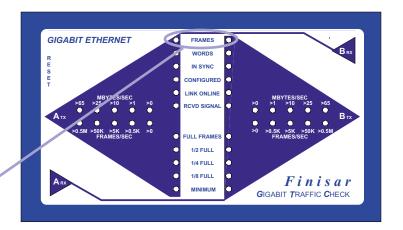
GT-C Gigabit Ethernet Gigabit Traffic Check

Status & Error Conditions

The GT-C reports a wide range of GigE error conditions.

INDICATOR	OFF	RED	YELLOW	GREEN
FRAMES	No SOF	Bad Frame	Previous bad Frame	Only good Frame
WORDS	No sync	Code violation	Previous code violation	Only good code
IN SYNC	No signal	Loss of sync	Previous loss of sync	Never loss of sync
CONFIGURED	No signal	Configuring /C1/ /C2/	Previous /C1/ /C2/	Never /C1/ /C2/
LINK ONLINE	No signal	Remote Fault	Previous Remote Fault	Never Remote Fault
RCVD SIGNAL	No GBIC	Loss of Signal	Previous lost Signal once	Good Signal

A bad frame is defined as the reception of SFD (start-of-frame delimiter) followed by a bad CRC.



Monitor Mode

The GT-C continuously monitors a full duplex Gigabit Ethernet link and reports on a wide range of status parameters, error conditions, and performance measures on a multicolor LED display.

The GT-C measures hardware parameters such as link power and synchronization. It monitors the link for various protocol-level conditions such as link on-line and link in a reset condition, plus data and frame errors. These error conditions are reported as instantaneous events (flashing red LED) and past events (continuous yellow LED).

Link traffic density is measured continuously on each side of the duplex link, and reported as Mbytes/sec, frames/sec, and frame size.

All LED display parameters are updated 30 times per second.

The GT-C retimes the data passing through the unit. The retiming process removes the timing jitter on the link at the point where the GT-C is inserted. Retiming is required for a device to be fully compliant with Gigabit Ethernet specifications.

Ordering Information

Description
Gigabit Traffic Check with DB-9 GBICs
Gigabit Traffic Check with HSSDC GBICs
Gigabit Traffic Check with 850 nm SC GBICs
Gigabit Traffic Check with 1310 nm SC GBICs

Units come complete with appropriate 2-meter accessory cable.

Specifications, configurations, and availability subject to change without notice.

Contact factory for custom requirements.

Test Mode

The GT-C provides a test mode for generating Gigabit Ethernet data, testing connections and cables, and estimating the length of cables.

In test mode, each transmit port sends a stream of Gigabit Ethernet data frames and Idle characters. To test a cable, attach it to the port and watch the errors indicators to determine if the cable or connections are corrupting the data.

The GT-C also measures and displays the delay between transmitting and receiving the data frames. Cable length can be estimated from this delay measurement.



Connect the GT-C to either copper or optical links by using industry-standard Gigabit Interface Converter modules (GBICs). You can change the media type in seconds. Media may be mixed, effectively creating a media converter, changing from a copper interface in one end to an optical interface in the other, for example. The GT-C can also extend links to 10 km by using single-mode, long-wavelength GBICs between two units.

Finisar Corporation • 1308 Moffett Park Drive, Sunnyvale, CA 94089-1133 • (408) 548-1000 • Fax (408) 543-0083 Email: instruments@finisar.com • Website: www.finisar.com

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