The GiLaner Key Features

ARP Monitoring
- Intercept ARP Spoofing/Attack/Poison
- Intercept IP Conflict
- Incoming ARP Packet Analysis
- Protect ARP Cache
- Active Defence
- Trace Attacker

RFC2544 Benchmarking Tests
- GiLaner can support the throughput, frame loss rate, back-to-back frames, and latency tests that are defined in RFC2544 used to measure and report the performance characteristics of network equipment

Traffic Generation
With GiLaner's user-friendly interface, the tester can do the performance evaluation and statistics display through the full-wire rate packet generation function on the copper or optical port.
- Support single or multi streams (up to 8 streams) can be individually configured with traffic generation setup.
- Able to configure FDX/HDX, preamble size, TX sequence tag, flow control and auto-negotiation.
- Able to generate packet with variable data length ranging from 46 ~ 9000 bytes at up to 100% wire speed rate.
- Generated packets can be varied with link speed (10/100/1000 Mbps), duplex mode (full/half), TX packet number, or TX timer, or Non-Stop, packet length, data pattern, Source/Destination MAC/IP address, VLAN ID and Priority, Double VLAN (QinQ), and TX utilization rate.
- Able to generate error frames such as: oversize, undersize, dribble, alignment and FCS errors.
- Able to do Constant /Burst transmission type.
- Able to analyze FRC2544 performance which includes through-put, frame loss rate, back-to-back and latency tests.
- Able to perform Internet work Throughput with two GiLaner uints (Up/Down stream test).
- IPV4 packet generation with checksum at wired speed. The IP header is programmable by the user.

Cable Test & Fiber Diagnostic
- Measure the UTP & STP cable length up to 150 meters long for OPEN/ SHORT status. When SFP transceiver with Diagnostic Monitoring Interface is used, the tester can display the TX/RX power, temperature, Laser Bias Current, & voltage for quick diagnostic on the fiber link.

Flash Port
- Identify the port in the switch/router that is under test from the remote.

BER Test
- Perform 10/100/1000 Mbps framed layer 1 (packet with preamble followed by PRBS data) and framed layer 2 (packet in 802.3 format) test.
- PRBS data pattern supported are: 2^7-1, $2^{15}-1$, $2^{20}-1$, $2^{23}-1$, $2^{31}-1$

Through Mode (GL-202/GL-220/GL-211)
- These three models have 2 ports installed, use the versatile through-mode provided by the tester for advanced troubleshooting. This mode allows bandwidth usage to be analyzed with results and findings shown in the statistics view.

Trace Route Test
- Able to perform trace route test to identify all MAC and IP address as well as its associated hostname in the route to the remote node.

Test Report Generation
- Able to record up to 80 sets of report by entering test date, test person, filename, and test site.
- Each report can be exported to PC in ASCII text format at the touch of a button.

Link Status/Control & Connectivity Test
- Support PING function for connectivity detection to any remote device in the network.
- Support Fixed IP or DHCP mode for acquiring IP address.
- Monitor or force the link status for its duplex mode (full or half), link speed (10/100/1000Mbps), TX/RX pair in the cable, link quality, flow control status & auto-negotiation capability.
- Able to shutdown the tester at user specified interval when not in operation.
- Able to FLASH remote port LED for port identification.
- Able to do ARP scan to search all the devices in the specified network for its MAC address, IP address and the associated host name.

Statistics View
- Various statistics counter of real time TX/RX PPS (Packets Per Second), TX/RX Utilization %, TX/RX Bandwidth, TX/RX Frames, VLAN, Pause Frame, Bit Error Count, Unicast, Multicast, Broadcast, Dribble, Alignment, Collision, Undersize, Oversize & FCS errors are all provided.

Upstream/Downstream Traffic Flow
- With two GiLaner units connected to the network, the system can perform the up/down stream traffic flow simultaneously at various different rates.
- This is a great feature in XDSL/FTTx application for bi-directional bandwidth simulation and verification.

Hardware Filter
- MAC/IP source and destination address
- ARP, Multicast or Broadcast
- TCP/UDP, VLAN ID/Priority
- Data Pattern for MPLS Tag, IP TOS, Cisco DSCP

Reflector (optional)
- Able to manually control for loop-back operation.
- ARP supported, MAC/IP source/destination address, port number swapped automatically.
- Able to loop-back all incoming traffic unchanged including invalid frames

GiLaner Layout

RJ45 — SFP

4 LED

| Link / Act | Quality / Err |
| Duplex/Col | Battery Low |

RS232 (Earphone Jack)

F1 F2 F3 F4
UP
LEFT
DOWN
EXIT

GiLaner™
GL-111

POWER INPUT
ENTER
RIGHT
PROG(Selection)

POWER ON

Applications

Application 1: RFC2544 Benchmarking Tests

RFC2544 describes a set of procedures for measuring the performance of Ethernet equipments but it is also used for the overall network.

Procedures to measure performance are:
- Throughput
- Frame Loss
- Back-To-Back
- Latency

Other functions:
- Traffic Generation
- BER test
- Bidirectional upstream/downstream test
- Loopback mode
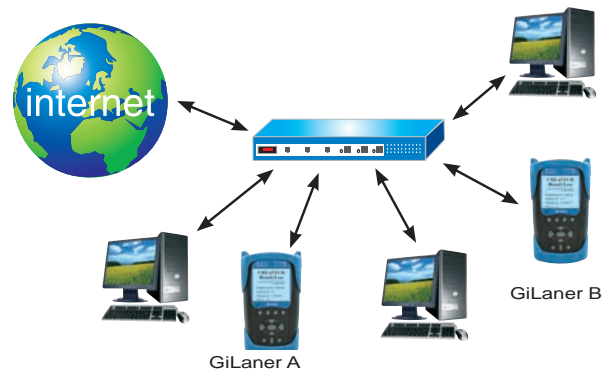
Test in same network

GiLaner A
GiLaner B

Application 2: Ping Trace-route/Flash Port

- PING remote host to check network connectivity
- Trace-route test to identify all the MAC/IP/Hostname in the route to the remote host.
- Flash port to identify the remote port in the switch/router as a means to find out which port the cable is connected to from the remote.
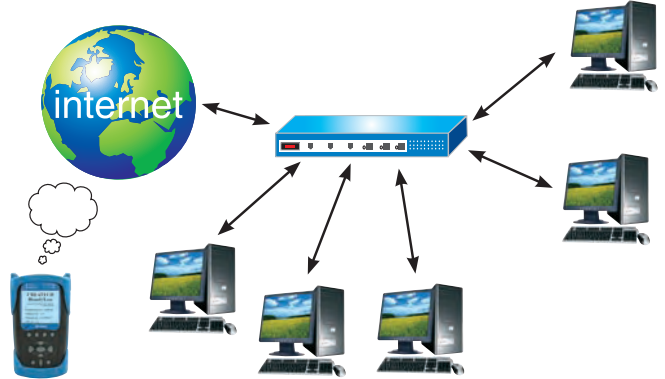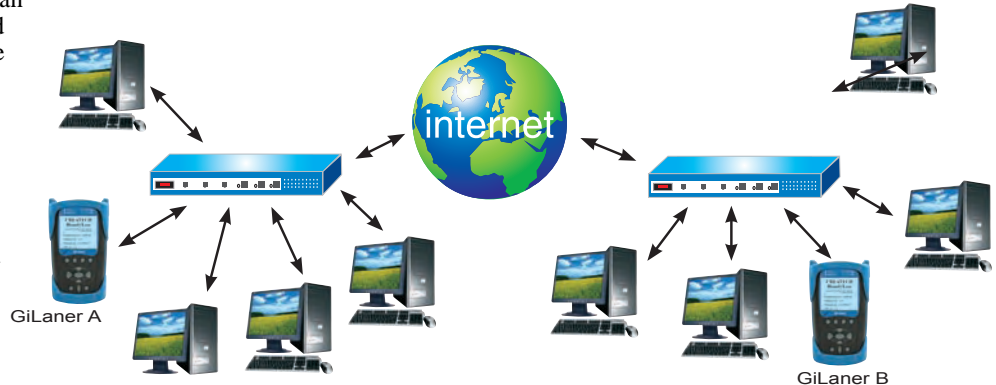

Test in different networks (1)

Application 3: Link Status / Link Control

Connecting the cable to the remote RJ45 port or fiber port checks the network health. For RJ45 cable, it can also force the network link to the specified speed and mode to see the link capability of the remote link partner. The result will show:
- Link: Up or Down
- Duplex: Full or Half Duplex
- Speed: Current Link mode (10/100/1000 Mbps)
- Quality: The signal strength for copper link (Good, Poor or Marginal)
- Flow control: to see the flow control capability of current link
- Auto-negotiation: to see the auto-negotiation capability of current link

GiLaner A
GiLaner B

Test in different network (2)

GiLaner Product Family

GiLaner series are built with multiple features that enable the users with tremendous efficiencies in the field. There are four models available in the GiLaner family for selection. The table below lists the interface configuration and the major functions supported in each model of the GiLaner family.

Features	GL-111	GL-211	GL-220	GL-202
Interface	One RJ45 port and one SFP port (only one port functions at a time)	One RJ45 port and one SFP port	Two RJ45 ports	Two SFP ports
Cable Length	yes	Yes	Yes	No
Fiber Diagnostic	yes	Yes	No	Yes
Network Statistics	yes	Yes	Yes	Yes
In-Line Mode	No	Yes	Yes	Yes
PING Test	Yes	Yes	Yes	Yes
Trace-Route Test	Yes	Yes	Yes	Yes
Bandwidth Utilization	Yes	Yes	Yes	Yes
Traffic Generation	Yes	Yes	Yes	Yes
ARP Scan Devices	Yes	Yes	Yes	Yes
Packet Generation	Yes	Yes	Yes	Yes
RFC-2544 Test	Yes	Yes	Yes	Yes
BER Test	Yes	Yes	Yes	Yes
Up/Downstream Test	Yes	Yes	Yes	Yes
Loop-back Mode	Yes	Yes	Yes	Yes
Hardware Filter	Yes	Yes	Yes	Yes
Firmware Upgrade	Yes	Yes	Yes	Yes
Screen Saving	Yes	Yes	Yes	Yes
Auto Shutdown	Yes	Yes	yes	Yes

Electrical Specification

Display	320 * 240 TFT LCD
Power	Li-Ion rechargeable battery lasts for at least 4 hours of continuous work with link at full wire speed. Battery Pack with AC Adaptor (100 ~ 240 VAC, 50/60 Hz)
Interface	• One 10/100/1000Mbps RJ45 port compliant with IEEE 802.3 for 10Mbps, 802.3u for 100Mbps, 802.3ab for 1000Mbps. • One SFP fiber port for 850nm, 1310nm or 1550nm transceiver. (Auto switched between the 2 ports depend on interface media connected. Fiber has higher priority when both ports are connected with remote), compliant with IEEE 802.3z.
I/O	12V DC input. COMM port as console port

LED	4 LED * Link/ACT (for 10/100/1000Mbps link) * Duplex/Collision * Quality(signal strength)/error frames * Battery
Weight	Less than 500g with battery in.
Dimension	90mm (W) x 160mm (D) x 40mm (H)
Audio	Audible buzzer to indicate key input.
Real Time Clock	Programmable for date/time display.
Operation Condition	Operating Temperature : 0'C ~ 40'C
Relative Humidity	5 % ~ 95 % (non-condensed).

Distributor Information

Email: