Digital Lightwave®

Simplify your network testing

What's the Future of OmniBER?

Industry leader Digital Lightwave has the answer...

- ✓ Replace your OmniBER with a NIC for little more than the cost of an OmniBER repair
- ✓ NIC provides more capabilities for less than half OmniBER's original cost
- ✓ 10% discount on all NIC orders received before June 1, 2010
- ✓ 15-day money-back guarantee

...remember, NO support for any OmniBER product after November 2010

Do you depend on Agilent/HP OmniBER for your testing needs? Most models are no longer supported by the manufacturer. As of November 1, 2010, none will be supported.

If you are stuck with this dead-end platform, especially if you need repair or calibration right now, Digital Lightwave can help.

With the OmniBER Replacement Program you can get a new Digital Lightwave NIC product with the latest SONET/SDH, OTN, Jitter/Wander, Ethernet, Fibre Channel, PDH/T-Carrier testing, three-year warranty and free technical support for a little more than the cost of an OmniBER repair.

The NIC is the optimum replacement for the outdated OmniBER. Upgrade to the Digital Lightwave NIC Platform now to take advantage of our special 10% limited-time discount.

Get a testing solution that protects your investment and provides the capabilities you need today and tomorrow.

NIC Plus®

OmniBER

OmniBER OTN

Digital Lightwave's OmniBER Replacement Program

1 TRADE-UP ADVANTAGE
Replace your outdated OmniBER with Digital Lightwave's NIC, today's test solution for next-generation networks.

2 TRADE-IN CREDITS
Reduce total cost of ownership (capex) with attractive trade-in credits when replacing an OmniBER product.

3 INVESTMENT PROTECTION
With a flexible software/firmware-based architecture, the scalable NIC is designed to grow as your network grows.

4 EASE OF USE
The NIC's intuitive, easy-to-use GUI interface requires minimal training for network technicians.

5 ADVANCED TECHNOLOGY
Meet today's network testing requirements with the NIC's Ethernet, Fibre Channel, VCAT/LCAS and All Path Testing.

6 FREE TECHNICAL SUPPORT
All NIC products are backed up by Digital Lightwave's unmatched technical support and customer service hotline 24/7/365, free!

Digital Lightwave OmniBER Replacement Program

with NIC Trade-in Options

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Digital Lightwave's NIC Platform vs. the OmniBER

FEATURES	OmniBER	OmniBER OTN	NIC Platform
General Features			
1.5M to 10.7G testing in a single chassis		•	•
1.5M to 43G testing in a single chassis			•
Multiple 10G ports in a single chassis (up to 5)			•
Dual 40/43G Testing in a single chassis			•
10M to 10G Ethernet LAN/WAN			•
1G/2G/4G/8G/10G Fibre Channel			•
Jitter Testing	•	•	•
Wander Testing	•	•	•
Internal Stratum III and recovered clock	•	•	•
External jitter modulation input	•	•	
BITS, SETS, 2.048MHz clock, 1.544MHz clock	•	•	•
LAPS (X.86)		•	
Email alerts from test set			•
Internal FDD	•	•	
USB/SD removable storage support			•
Free 24-hour technical support			•
Reporting functions	•	•	•
Save and restore configuration	•	•	•
Timed tests	•	•	•
Screen capture	•	•	•
Battery power available			•
Remote control capability	•	•	•
SCPI over GPIB/Ethernet for automated scripting	•	•	•
Graphics printer	Internal	Internal	External
FC/PC Connectors, SC and ST optional	•	•	
LC Connectors (SC on 40G module) adapters available			•
Hot-Swappable SFP/XFP optics			Yes, Exc. Jitter
Available software for monitoring multiple units			NIO
SONET/SDH Testing			
STM-0e/EC-1/STS-1	•	•	•
STM-1e/EC-3/STS-3	•	•	•
OC-1/STM-0	•	•	•
OC-3/STM-1	•	•	•
OC-12/STM-4	•	•	•
OC-48/STM-16	•	•	•
OC-192/STM-64		•	•
OC-768/STM-256			•
Internal Stratum III and recovered clocks	•	•	•
BITS, SETS, 2.048MHz clock, 1.544MHz clock	•	•	•
8KHz/1.544/2.048/10 MHz external 75ohm TTL clocks			•
Error and Alarm insertion and measurement	•	•	•
PRBS and user-defined patterns	•	•	•
Overhead manipulation/monitoring	•	•	•
Overhead capture	•	•	•
Overhead sequence generation	•	•	•
APS byte (K1/K2) manipulation	•	•	•
Tandem connection monitor	•	•	•
Performance monitoring	•	•	•
Frequency offset	•	•	•
Built-in power meter	•	•	•
Pointer analysis	•	•	•
S1 byte control/monitoring	•	•	•
C2 byte control/monitoring	•	•	•
Service disruption measurement	•	•	•
Round-trip delay (RTD)	•	•	•
Intrusive thru mode	•	•	•
POS testing	•	•	GFP only
Tributary Scan	•	•	•
Mixed mapping support		•	•
Mixed mappings up to full OC-192/STM-64		•	•
ATM over SONET/SDH testing	•	•	•
SONET/SDH Jitter testing	•	•	•
SONET/SDH Wander testing	•	•	•
AU-n/STSn Payload overwrite in passthru mode	•		
Tu-n/VT Payload overwrite in passthru mode	•		
Optical Stress Tests	•		
Overhead BER test (any single byte)	•	•	

Digital Lightwave OmniBER Replacement Program
with NIC Trade-in Options

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Digital Lightwave's NIC Platform vs. the OmniBER (Cont'd)

FEATURES	OmniBER	OmniBER OTN	NIC Platform
OTN (ITU-T G. 709) Testing			
OTU-1 (2.66G)		•	•
OTU-2 (10.7G)		•	•
OTU-3 (43G)			•
10G FEC OTU-1e (11.049G) and OTU-2e (11.095G)			•
BITS, SETS, 2.048MHz clock, 1.544MHz clock		•	•
8KHz/1.544/2.048/10 MHz external 75ohm TTL clocks			•
OTN with SONET/SDH client		•	•
OTN with GFP mappings		•	•
Forward Error Correction Reed Solomon (255,239)		•	•
OTU/ODU/OPU alarm/error layers		•	•
OTN overhead manipulation and analysis		•	•
Intrusive Through mode		•	•
OTN service disruption		•	•
ODU-1 to ODU-2 multiplexing			•
ODU-2 to ODU-3 multiplexing			•
ODU-0 to ODU-1 to ODU-2 multiplexing			•
OTN Jitter testing		•	•
OTN Wander testing		•	•
Ethernet Testing			
10GigE LAN			•
10GigE WAN			•
10GigE FEC (OTU-1e, OTU-2e)			•
Dual Port GigE			•
Dual Port 10/100/1000BaseT			•
Dual Port 100BaseFX			•
RFC 2544 Throughput/latency			•
RFC 2544 Frame Loss			•
RFC 2544 Back-to-Back Burst			•
Up to 32 simultaneous streams per port			•
Rate setting by interpacket gap			•
Burst traffic			•
Ramped traffic			•
ARP support			•
Runt frame support			•
Frame size up to 16,000 bytes			•
IP reflection and pass-thru modes			•
Stacked VLAN (Q in Q), up to four			•
10G SEED A/B testing			•
Next-Generation SONET/SDH Testing			
VCAT High-Order and Low-Order		•	•
Frame delay/pointer delay on individual member		•	•
VCAT/LCAS High-Order and Low-Order		•	•
GFP-Framed with up to 32 Ethernet streams			•
GFP-Transparent with up to 32 Ethernet streams			•
GFP-Bulk with PRBS payload			•
LCAS High-Order and Low-Order		•	•
LCAS automatic source/sink state machine emulation		•	•
LCAS Protocol Emulation		•	•
Ethernet-over-SONET/SDH		•	•
GFP Encapsulation Analyzer		•	•
PDH/T-Carrier Testing			
DS1/E1/E3/DS3/E4	•	•	•
BITS, SETS, 2.048MHz clock, 1.544MHz clock	•	•	•
8KHz/1.544/2.048/10 MHz external 75ohm TTL clocks			•
PDH/T-Carrier Jitter Testing	•	•	•
PDH/T-Carrier Wander Testing	•	•	•
DS1 loop codes	•	•	•
Fractional T1 and E1	•	•	•
DS3 FEAC codes	•	•	•
M13 multiplex/demultiplex	•	•	•
2Mb/s into DS3 Mapping	•	•	•
ATM over PDH/T-Carrier testing	•	•	•
Performance monitoring	•	•	•
DS0 monitoring	•	•	•
DS2/8Mb Measurement/Generation	•	•	
Spare Bits Generation	•	•	

Digital Lightwave OmniBER Replacement Program

with NIC Trade-in Options

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The Digital Lightwave NIC Platform

NIC NXG 2-slot chassis

The 2-Slot NIC chassis is a compact, lightweight and very portable configuration for field testing of SONET, SDH, OTN, ATM, Ethernet and DWDM networks. Can be configured with SONET/SDH/OTN and PDH/T-Carrier from 1.5M to 10.7G with optional Fibre Channel, ATM and more.

NIC BP 2-slot chassis Battery Power chassis

Supports all NIC NXG configurations with the addition of battery power.

NIC 40G 2-slot chassis with 40/43Gbps

The industry's smallest and lightest SONET/SDH 40G and OTN 43G test solution.

NIC Plus 5-slot chassis

All-in-one testing solution, supporting many different configurations. Can be equipped as the industry's only portable 1.5M to 43G test solution or the industry's only portable dual-port 40/43G test solution. Supports multi-port testing with up to 5 10GigE ports and 5 ports of SONET/SDH/OTN up to 10.7G in a single chassis. Supports jitter/wander testing from 1.5M to 10.7G.

NIC EP 5-slot rackmount chassis

Supports all NIC Plus configurations in a rackmount chassis for remote monitoring, laboratory and manufacturing applications. Supports automated scripting support and works with the Digital Lightwave Network Impairment Observer (NIO) Test Management Software to monitor, control and manage multiple test devices in real time.

The Following Technologies are Available

- SONET/SDH 155Mbps to 2.5Gbps
- SONET/SDH 10Gbps
- SONET/SDH 40Gbps
- 10Gig Ethernet LAN
- 10Gig Ethernet WAN
- GigE (up to 4 ports per module, up to 20 ports in NIC Plus/NIC EP)
- 10/100/1000BaseT (up to 8 ports per module, up to 40 ports in NIC Plus/NIC EP)
- 100BaseFX
- Fibre Channel
- OTN 2.66 Gbps
- OTN 10.7 Gbps
- OTN 43 Gbps
- ODU-1 to ODU-2 Multiplexing
- ODU-0 to ODU-1 Multiplexing
- ODU-0 to ODU-2 Multiplexing
- 10GigE FEC (OTU-1e and OTU-2e)
- Jitter/Wander
- ATM
- GFP, GFP-T, GFP Bulk
- VCAT/LCAS
- PDH/T-carrier testing
- PDH/T-carrier drop/insert
- Optical Spectrum Analyzer
- Serial port (RS-232) testing
- more...

NOTE: The above testing capabilities require specific hardware modules, software and license-based Test Options.

For more information or a sales quote, visit www.lightwave.com/contact or email dlisales@lightwave.com

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