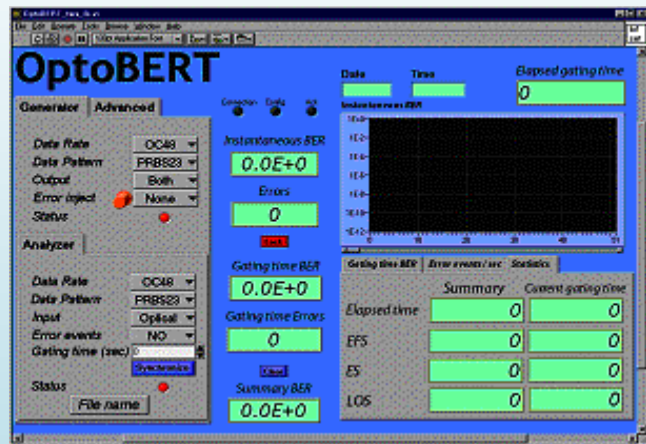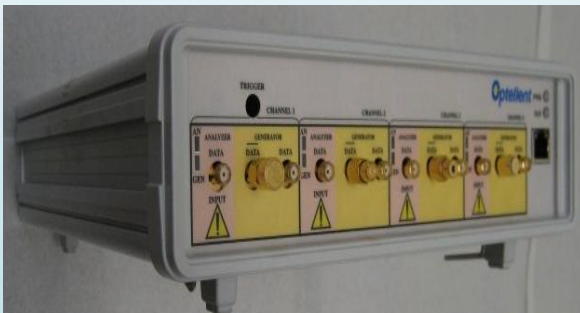# *Testing Made Simple*

**Cost-effective 0.1 – 30 Gbps Electrical & Optical BER Testers, Pattern Generators, Oscilloscopes, and Optical Switch**

## Test Applications

- Production of Optical Transceivers, Transponders
- Opto-Electronic Components and Devices (TOSAs/ ROSAs, )
- QSFP, CFP, CXP modules, Active Optical Cables
- High-speed ICs, modules and boards
- Troubleshooting WDM optical networks
- Research Labs and Universities

## Low cost, High productivity ...............

That is the premise behind OPTELLENT's OptoBERT™ family of Electrical/Optical bit-error-ratio testers (BERTs) and Data/Pattern Generators. The OptoBERT™ testers feature:

- Integrated pattern generator and bit-error-rate analyzer
- Internal reference frequency
- Both electrical and optical interfaces
- Multiple patterns: PRBS, stress, and User-defined patterns
- Intuitive GUI and automated test reports
- Easy-to-use, cost-efficient and compact
- 2-year standard warranty & Low Cost of ownership

Besides offering industry-leading lead times, Optellent specializes in customizing test equipment to meet the specific needs of its customers. Optellent has successfully incorporated custom patterns, MZ drivers, clock and data recovery options, etc., for its customers. Optellent is committed to supporting its customers with integration of our test equipment into their test suites.

## Software

The OptoBERT™ and the Data/Pattern Generators family of products features software that runs on Windows 98/2000/NT, XP, VISTA, Windows 7 over an RS-232 serial interface via an RJ-45 connector. An optional RS-232-to-USB converter is available

Software drivers are available for incorporating the OptoBERT into test automation suites using programs like C++, LabVIEW, VisualBASIC, and Agilent VEE.

## OPS-Series Optical Switch

The OPTELLENT OPS-Series Optical Switch is a cost-effective easy-to-use all-optical switch solution for demanding applications in fiber optic instrumentation and communication. The rack mountable instrument can switch up to 4 input fibers to any of up to 48 output fibers in a simplex or duplex mode, independently of data format, wavelength or optical power. The switch supports either single or multimode fibers. Optical connections are set by a MEMS-based switch network, where micro-machined silicon mirrors redirect light to the selected ports. The use of MEMS technology offers solid-state reliability and long-term stability. The OPS-Series Optical Switch can be controlled locally using RS-232 interface or from anywhere over the internet using its standard Ethernet interface. An intuitive graphical user interface (GUI) enables easy point-and-click operation

| Model Number | Description |
|---|---|
| OPG 1250/3200/4250 | 1.25/3.2/4.25 Gb/s Data Generator |
| OPG 6250 | 6.25 Gb/s Data Generator |
| OPGX110 | 11Gb/s Pattern Generator |
| OPB 1250/3200/4250 | 1.25/3.2/4.25 Gb/s OptoBERT |
| OPB 5000 | 5 Gb/s OptoBERT |
| OPBX110 | 11Gb/s OptoBERT |
| OPBX150 | 14 Gb/s OptoBERT |
| OPB 04X10 | 11Gb/s 4-channel BERT |
| OPB 04X15 | 15Gb/s 4-channel BERT |
| OPB 04X28 | 28Gb/s 4-channel BERT |
| OSC 1250 | 12.5 Gb/s Oscilloscope |
| JIS 1250 | 12.5 Gb/s Jitter Injection System |
| CDR 3200 | 3.2Gb/s Clock Recovery System |
| TGRX110/QTGX110 | 11 Gb/s Trigger Recovery System |

| Protocol | Data Rate (Gbps) |
|---|---|
| **Telecom** | |
| OC-3 | 0.155 |
| OC-12 | 0.622 |
| OC-48 | 2.48832 |
| OC-48 with FEC | 2.66606 |
| OC-192: STS-192 / STM-64 | 9.95328 |
| G.709 | 10.709 |
| **Datacom, Storage & Video** | |
| Fast Ethernet | 0.125 |
| Standard definition TV(SDTV-SDI) | 0.27 |
| Fibre Channel (1GFC) | 1.0625 |
| Gigabit Ethernet | 1.25 |
| High Definition TV(HDTV-SDI) | 1.485 |
| Serial-ATA | 1.5 |
| 2 X Fibre Channel (2GFC) | 2.125 |
| Infiniband | 2.5 |
| Serial-ATA2 | 3 |
| RapidIO | 1.25-3.125 |
| XAUI | 3.125 |
| 4 X Fibre Channel (4GFC) | 4.25 |
| 4 X Infiniband & 10GBASE-T | 10 |
| HDMI 1.3 | 10.2 |
| 10GBASE-R (LAN/PHY) | 10.3125 |
| 10 X Fibre Channel (10GFC) | 10.519 |
| 10GBASE-R OTU2 FEC | 11.096 |
| 16G FC | 14.025 |
| 100G data rates for QSFP+/CFP | 25.78125 / 27.95 / 28.05 |

Contact Optellent for your custom testing needs, specifications, and for information about local distributors in your area.

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