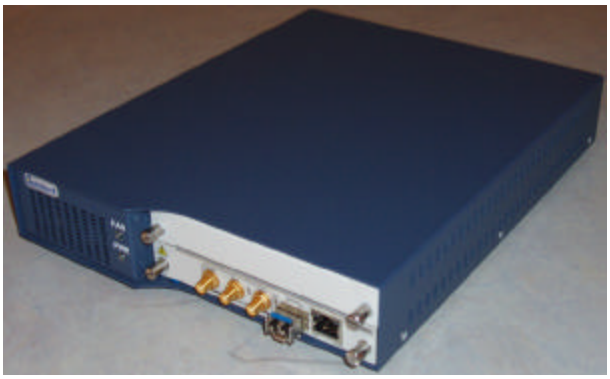
OPG3200

3.2Gbps Compact Data Generator System



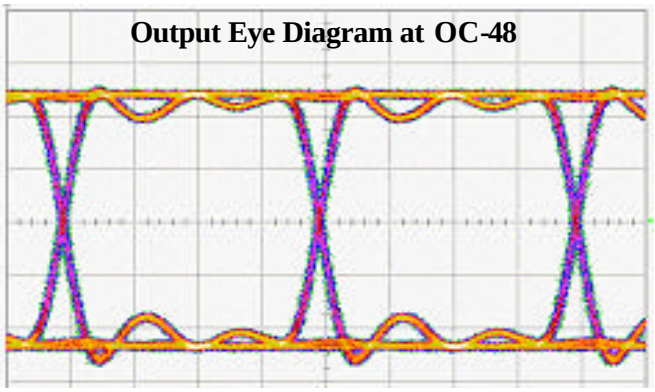
Overview

The OPTELLENT OPG3200 is a cost-effective easy-to-use multi-rate data generator system for testing components and systems. It incorporates a pattern generator and reference clock circuits in a compact module that provides both electrical and optical interfaces.

An intuitive graphical user interface (GUI) enables simple point-and-click operation. It is available with 8 preset data rates including Gigabit Ethernet and OC48 as well as continuously variable data rate options.

Applications

- Optical/electrical system and component testing
- Installation testing and troubleshooting in optical transport networks
- EMI/EMC testing



Key Features

- **Compact Data/Pattern Generator**
- **Easy-to-use and Cost-efficient**
- **Intuitive Graphical User Interface**
- **Electrical and Optical Interfaces**
- **User-defined Data Patterns**
- **RS-232 Serial Port**

Data Rates

OC-3	155.52 Mb/s
OC-12	622.08 Mb/s
Fibre Channel	1.0625 Gb/s
Gigabit Ethernet	1.25 Gb/s
2 X Fibre Channel	2.125 Gb/s
OC-48	2.48832 Gb/s
OC-48 with FEC	2.66606 Gb/s
XAUI	3.125 Gb/s

Variable Data Rate Selection is available as an option (See Ordering Information).

Optellent Inc. Phone: (408) 230-1329 Fax: (408)-528-6666 Email: sales@optellent.com www.optellent.com

Pattern Generator Specifications

Supported Patterns:

- PRBS 7, PRBS 23
- NRZ 101010…
- User defined (Optional)

Generator Output				
Parameter	**Min**	**Typ**	**Max**	**Units**
Output type	Single-ended or Differential (Optional)			
Data rate	155.52		3125	Mb/s
Frequency accuracy			± 50	ppm
Output amplitude, single ended **(1)**	700	850	1200	mV
Data rise time **(2)**		70	90	ps
Data fall time **(2)**		70	90	ps
Data output RMS jitter **(2)**		4	5.5	ps
Clock output amplitude		300		mV
Connector, Electrical	50 Ω SMA, front panel			
Connector, Optical	LC (SFP)			

Trigger Output				
Parameter	**Min**	**Typ**	**Max**	**Units**
Output amplitude	400			mV
Output type	Single-ended, AC-coupled			
Connector	50 Ω SMA, front panel			

(1) Larger output signal amplitudes up to 1800mV are available as an option

(2) Measurements based on PRBS23 data at 2488.32 Mb/s (OC-48).

Optical Output:

SFP housing is provided as a standard feature
SFP transceiver is optional
Wavelength options: 850nm, 1310nm, 1550nm

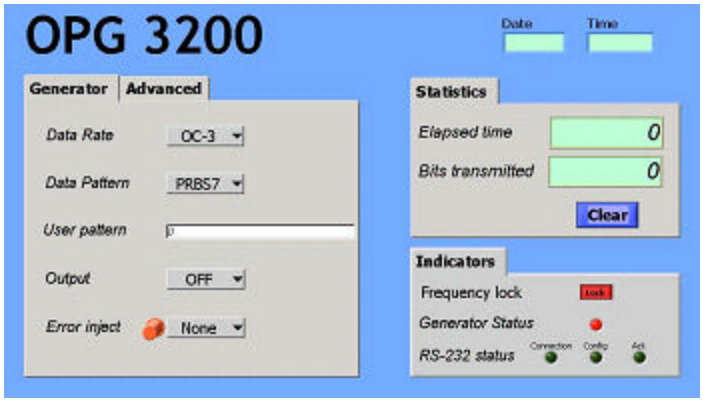
System Specifications

PARAMETER	MIN	MAX	UNIT
Chassis Electrical Voltage	100	240	VAC
Current Drain at Normal Voltage		1.4	A
Operating Temperature Range	5	40	^{o}C
Storage Temperature Range	-40	70	^{o}C
Dimensions (L x W x H)	273x216x45 10.75x8.5x1.75		mm^3 inch^3
Safety	UL, IEC-61010-1		
EMC	EN55011, EN61000-3-2, EN61000-3-3, BS EN61326		
RS 232 PC Interface	RJ-45 connector		

Software

The OPG3200 software runs on Windows 98/2000/NT and XP over RS-232 serial interface via an RJ-45 Connector provided on the front panel. A software driver is available for incorporating the Data Generator System into test automation suites using programs like C++, LabVIEW, VisualBASIC, and HP VEE.

User Interface



Ordering Information:

OPG3200-X-X-X-X

P: Preset Data Rates
C: Custom Data Rate
V: Variable Data Rate

S: Single-ended Electrical Output
D: Differential output

X: Custom Options

0: No Optical Transceiver;
1: Optical Transceiver (SFP) 850nm
2: Optical Transceiver (SFP) 1310nm
3: Optical Transceiver (SFP) 1550nm

Example: OPG3200-P-S-0: 3.2Gb/s Data Generator, Preset data rates, Single-ended electrical output, No optical Transceiver

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