ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Newport 8610.8C* at our website: ***Click HERE***

Home / Product / Photonics Instruments / Laser Diode Testing

Model 8016
High-Density Laser Diode Controller

Detail | Pricing | Support/Download
Summary | Specs | Compare

Product Home
Diffraction Gratings
Lasers
Light Sources
Motion Control
Optical Filters
Optics
Opto-Mechanics
Photonics Instruments
Fiber Alignment and Assembly
Fiber Optic Components
Fiber Optics Test Instrumentation
Laser Diode Testing
300B Series
500B Series
700 Series
740 Series
760 Series
762 Series
Cable Diagrams
Laser Diode Adaptors
Laser Diode Instrumentation Selection Guide
Model 3040
Model 3150
Model 5000
Model 5405
Model 5600
Model 6000
Model 708
Model 8000
Model 8008
Model 8016
TOC
Tutorial
Lasers
Optical Fibers and Accessories
Oriel Single Channel Detectors and Accessories
Power Meters and Detectors
Spectroscopy Instruments
Vibration Control



Click to enlarge

Pricing & Ordering
Specifications
Contact Sales Rep

Printable
Demos
Application Notes

To Request A Quote

Add this page to My Links

Combination LDD & TEC Module Specificatio

Laser Diode Driver Selection	8605.16C	8610.16C
Laser Output		
Output Current Range (mA)	0–500	0–1000
Output Current Resolution (mA)	0.0076	0.0153
Output Current Accuracy(1)	±(0.03% + 15 µA)	±(0.03% +30 µA)
Compliance Voltage (V) (3)	3	
Temperature Coefficient (ppm FS/°C)	<50	
Short-Term Stability (1 h) (ppm FS)	<10	
Long-Term Stability (24 h) (ppm FS)	<10	
Noise/Ripple (rms) (µA) (4)	<2	<5
Current Limit		
Range (mA)	0–500	0–1000
Resolution (mA)	0.000–3.000	
Accuracy (mA)	±2	
Internal Function Generator		
Waveforms	Triangle, Sinewave, Squarewave	
Frequency Range(5)	200 Hz–300 kHz	
Squarewave Duty Cycle	50 ±5	
Independent Output Set Points	I_{max}, I_{min}	
Frequency Jitter	<1	
Frequency Accuracy	±5	
Amplitude Accuracy	±5	
Sinewave THD	<2%	
Squarewave Risetime (µsec)	<5	<10
Photodiode Input		

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Monitor Current Range (mA)	0–5	
Monitor Current Stability (24 h)	±0.02	
Monitor Current Accuracy[1]	±(0.004% + 0.5 µA)	
Temperature Coefficient	<0.02% FS/°C	
Photodiode Reverse Bias	None	
Measurement Display		
Output Current Range (mA)	0–500.00	0–1000.0
Output Current Resolution (mA)	0.01	0.1
Output Current Accuracy[1]	±(0.02% + 20 µA)	±(0.02% + 200 µA)
Forward Voltage Range (V)	0.000–3.000	
Forward Voltage Resolution (mV)	1	
Forward Voltage Accuracy[1]	±(0.005% + 1 mV)	
Photodiode Current Range (µA)	5–5000	
Photodiode Current Resolution (µA)	0.1	
Photodiode Current Accuracy[1]	±(0.01% + 0.5 µA)	
PD Response Range (µA/mW)	0.00–600.00	
PD Response Resolution (µA/mW)	0.01	
Optical Power Range (mW)	0.00–500.00	0.00–1000.0
Optical Power Resolution (mW)	0.01	0.1

Temperature Controller Specifications (all modules)

TEC Output	
Type	Bipolar, low noise
Maximum Current (A)	2
Maximum Voltage (V)	4
Typical Power (W)	8
Current Limit	
Range (A)	0–2.0
Accuracy (mA)	±10
Ripple/Noise (rms) (mA)	<1
Short-Term Stability (1 h)	0.0005°C
Long-Term Stability (24 h)	0.001°C
Temperature Coefficient	<0.05°C/°C
TEC Measurement Display	
Range	

	Temperature	-100.00 to +240.00°C
	Resistance (10 µA) (kΩ)	0.01–495
	Resistance (100 µA) (kΩ)	0.001–49.5
	TE Current (A)	-2.000 to +2.000
Resolution		
	Temperature	0.01°C
	Resistance (10 µA) (Ω)	10
	Resistance (100 µA) (Ω)	1
	TE Current (mA)	1
Accuracy		
	Temperature(2)	Typical ±0.1°C
	Resistance (10 µA)(1)	±(0.04% + 16Ω)
	Resistance (100 µA)(1)	±(0.05% + 8Ω)
	TE Current(1)	±(0.3% + 2 mA)
Temperature Sensor		
Sensor Type		NTC, 2-wire Thermistor
Sensor Bias (µA)		10/100
Thermistor Calibration $1/T=(C1 \times 10^{-3}) + (C2 \times 10^{-4})(\ln R) + (C3 \times 10^{-7})(\ln R)^3$		

1) ± (x% Reading + Fixed Error)
2) Temperature is a value derived from the sensor's paramet (resistance) using the thermistor calibration equation. Accura can be computed by applying the sensor's parameter to the above equation at the temperature in question.
3) May be less with common laser anode/thermistor package
4) True rms, 3 Hz–300 kHz, 1/2 FS, resistive load
5) Output current may begin to roll-off at higher frequencies
6) All LDD modules configured for Common-Cathode. Please call for Common-Anode configuration

Mainframe Specifications

Display Type	LCD graphics display, 128 H x 240 W pixels
Display Backlighting	Green LED
Display Controls	Brightness, contrast (contrast optimizes viewing angle) and invert screen
Laser Diode On Indicator	Green LASER ACTIVE LED indicates at least one laser diode is on
Output Connector	15-pin female D-sub
Chassis Ground	4 mm banana jack
GPIB	24-pin IEEE-488
RS-232C	9-pin male D-sub
Power Requirements	90–132 V (max. 5 A), 198–250 V (max. 2.5 A), 50–60 Hz
Size (H x W x D) [in. (mm)]	5.25 (133) x 16.75 (426) x 14 (356)
Mainframe Weight [lb (kg)]	31.5 (14.3)
Module Weight [lb (kg)]	3.5 (1.6) typical

Operating Temperature	0 °C to 40 °C (<70% relative humidity non-condensing)
Storage Temperature	-20 °C to + 60 °C (<90% relative humidity non-condensing)
Laser Safety Features	Laser enable keyswitch, interlock, output delay (meets CDRH US21 CFR 1040.10)
Isolation/Crosstalk	All modules electrically isolated from earth ground

Back To Top

Pricing & Ordering

Home | Products | Service & Support | Applications & Markets | About Newport | Investors | My Account | Contact Us

Terms of Use | Privacy Policy Copyright © 1996-2005 Newport Corporation. All rights reserved.



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP