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***

Temperature Controller Specifications (all modules)

TEC Output	
Type	Bipolar, low noise
Maximum Current (A)	2.5
Compliance Voltage (V)	>6
Typical Power (W)	15
Current Limit	
Range (A)	0–2.5
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	
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)	-2.500 to +2.500
Temperature	0.01°C
Resistance (10 µA) (Ω)	10
Resistance (100 µA) (Ω)	1
TE Current (mA)	1
Temperature[4]	Typical ±0.1°C
Resistance (10 µA)[3]	±(0.04% + 16Ω)
Resistance (100 µA)[3]	±(0.05% + 8Ω)
TE Current[3]	±(0.3% + 2 mA)
Temperature Sensor	
Sensor Type	NTC, 2-wire Thermistor
Sensor Bias (µA)	10/100
Thermistor Calibration	
$1/T = (C1\ 10^{-3} + (C2 \times 10^{-4})(\ln R) + (C3 \times 10^{-7})(\ln R)^3$	

1) True rms, 3 Hz–300 kHz, 1/2 FS, resistive load
2) Fixed—If desired, specify 0–5 V at time of order
3) ± (x% Reading + Fixed Error)
4) Temperature is a value derived from the sensor's parameter (resistance) using the thermistor calibration equations. Accuracy can be computed by applying the sensor's parameter to the above equation at the temperature in question.
5) May be lower with common anode/thermistor package
6) Output current may begin to roll-off at higher frequencies

Combination LDD & TEC Module Specifications

Laser Diode Driver Selection	8605 8605-SO 8605-5V	8610 8610-SO 8610-5V	8630 8630-SO 8630-5V
Laser Output			
Output Current Range (mA)	0–500	0–1000	0–3000
Output Current Resolution (mA)	0.0076	0.0153	0.0458
Output Current Accuracy[3]	±(0.03% + 15 µA)	±(0.03% + 30 µA)	±(0.03% + 90 µA)
Compliance Voltage (V)[5]	7	7	5
Temperature Coefficient (ppm FS/°C)		<50	
Short-Term Stability (1 h) (ppm FS)		<10	
Long-Term Stability (24 h) (ppm FS)		<50	
Noise/Ripple (rms) (µA)[1]	<2	<5	<10
Current Limit			
Range (mA)	0–500	0–1000	0–3000
Resolution (mA)		1	
Accuracy (mA)	±2	±2	±4
Internal Function Generator			
Waveforms		Sinewave, Squarewave	
Frequency Range[6]		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)	<1	<5	<10
Photodiode Input			
Monitor Current Range (mA)	0–5	0–5	0–20
Monitor Current Stability (24 h)		±0.02% FS	
Monitor Current Accuracy[3]	±(0.004% + 0.5 µA)	±(0.004% + 0.5 µA)	±(0.004% + 1 µA)
Temperature Coefficient		<0.02% FS/°C	
Photodiode Reverse Bias[2]	5 VDC for "-5V" versions. The others have PD bias of zero.		
Measurement Display			
Output Current Range (mA)	0–500.00	0–1000.0	0–3000.0
Output Current Resolution (mA)	0.01	0.1	0.1
Output Current Accuracy[3]	±(0.02% + 20 µA)	±(0.02% + 200 µA)	±(0.02% + 200 µA)
Forward Voltage Range (V)	0.000–7.000	0.000–7.000	0.000–5.000
Forward Voltage Resolution (mV)		1	
Forward Voltage Accuracy[3]		±(0.005%+1 mV)	
Photodiode Current Range (µA)	5–5000	5–5000	15–20,000
Photodiode Current Resolution (µA)		0.1	
Photodiode Current Accuracy[3]	±(0.01% + 0.5 µA)	±(0.01% + 0.5 µA)	±(0.01% + 1 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	0.00–1000.00	0.00–3000.00
Optical Power Resolution (mW)	0.01	0.01	0.1

"-SO" Combo modules indicate the Sync Out version, enabling synchronized modulation among modules.

"-5V" Combo modules are provided with a permanent 5 VDC bias applied across the monitor photodiode pins. Note that this is not user adjustable.

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