



## GDL-8200

**Key Features:**

Mini Size  
 Mode-Hopping Suppression  
 Low Cost  
 Auto Power Control Function  
 High Reliability

**Applications:**

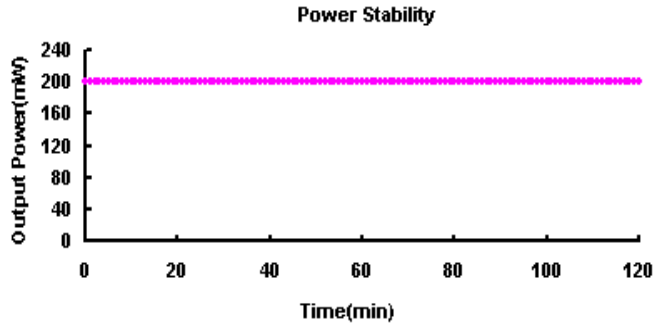
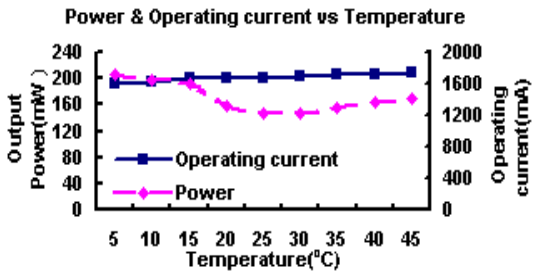
Laser Display  
 Surveying Equipment  
 Laser Alignment & Pointing

Model Number		GDL-8200			
Optical Parameters		Photop Specs			Conditions
		Min	Typ	Max	
Wavelength		531nm	532nm	533nm	
Output Power		150mW	200mW	250mW	
Power Stability	2hours @ Constant Temp	-	+/-2%	+/-5%	APC
	Over Operating Temp Range	-	+/-10%	+/-25%	
Operating Temperature (Case)		5~+45 °C	-	-	APC
Residual IR		-	-	0.2%	
Beam Diameter		-	0.2mm	-	At output window
Beam Divergence		-	9.5mrad	12mrad	Full angle, 1/e <sup>2</sup>
Roundness		70%	85%	100%	
M-Square			1.6	2.0	
<b>Electrical Parameters</b>					
LD Working Current		-	1100mA <sup>①</sup>	1600mA	5~+45 °C
LD Working Voltage		1.9V	2.2V	2.5V	
Monitor Current		0.64mA	1.8mA	2.5mA	200mW @ 25 °C
GDL Power Consumption		-	2.4W <sup>②</sup>	4W	5~+45 °C
<b>Mechanical Parameters</b>					
Laser Head Dimensions	Length	-	22.2mm	22.7mm	
	Diameter	12.00mm	12.01mm	12.05mm	
Beam Alignment Tolerance	Position( $\Delta r$ )	-	0.2mm	0.3mm	
	Angle	-	10mrad	17.5mrad	
Laser Weight		-	5.6g	-	
<b>Reliability</b>					
Operating Humidity			5%~85% R.H.		
Storage Temperature			-40 to +85 °C		
Shock			1500g, 0.5ms, 6 shocks		3 axes, 2 shocks/axis
Vibration			20~2000Hz, 0.02g <sup>2</sup> /Hz		3 axes, 1hr/axis
Expected Lifetime (MTTF)		5000hrs			Room temperature

<sup>①</sup> 200mW @ 25 °C

<sup>②</sup> 200mW @ 25 °C

## Typical Output Performance



## Dimensions and Pin Configuration (Unit: mm)

