

Power Supply Options for Helium-Neon Lasers



All Lumentum helium-neon power supplies provide a highly regulated constant current output, allowing for excellent optical stability and performance.

The power supply automatically adjusts laser tube voltage to maintain a fixed discharge current. A CDRH time delay is active on all power supplies, and may be defeated on power supply modules. All power supplies have complete fault protection and can withstand output short circuits, output open circuits, or arc-to-ground conditions. Power supplies are available for 100, 115, 200, 230 V AC, and 12 V DC operation, with efficiencies greater than 85 percent.

Complete laser systems are made by combining a 1100 series laser head with the appropriate 1200 series power supply. Laser systems meet Center for Devices and Radiological Health requirements and display logotypes describing CDRH classification and operating limits.

Key Features

- Highly regulated, constant-current output
- Complete fault protection
- Exceptional direct current (DC) stability
- Typical conversion efficiency >85%
- Compact, rugged packaging
- Exceptional lifetime

Applications

- For use with Lumentum helium-neon laser heads and tubes

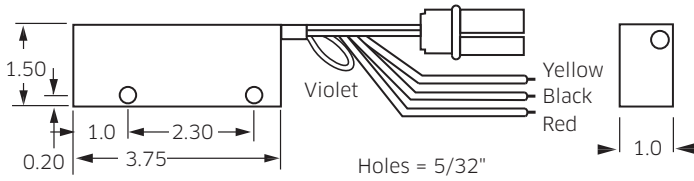
Compliance

- TÜV EN 60-950
- UL1950
- CUL

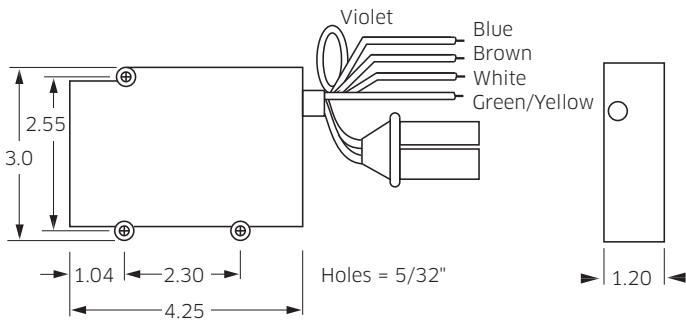
Power Modules

(Specifications in inches unless otherwise noted. All power supply modules incorporate 12-inch high voltage cables with standard connector and 12-inch flying lead inputs.)

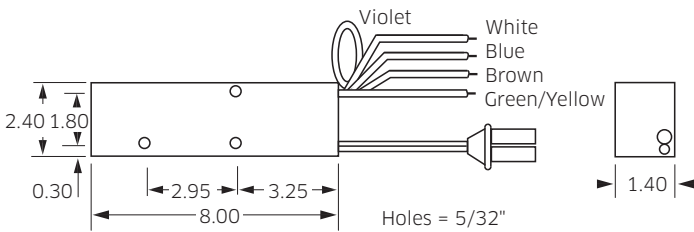
Model 101T



Model 314T

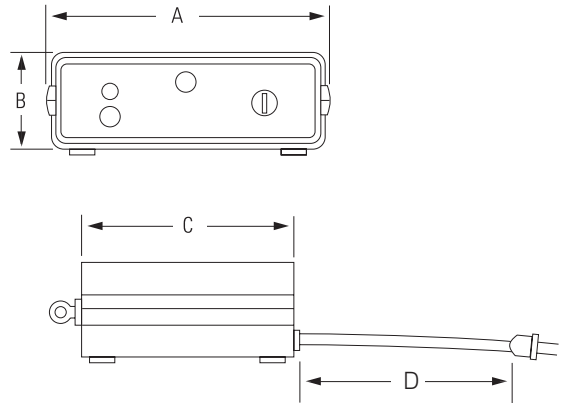


Model 380T



Model 1200 Series Power Supply

(Specifications in inches unless otherwise noted.)



	A	B	C	D
120x-x	5.1	2.25	5.25	72" for -1, -3;
121x-x	8.56	2.79	9.35	2.5 m for -2

For 1200 series laboratory supplies, specify the desired input voltage by adding the appropriate number:

- 1 for 115 V AC
- 2 for 230 V AC
- 3 for 100 V AC

Power Supply Module Input Wiring Information

Wire Color	115/230 V AC Versions		100/200 V AC Versions		12 V DC Versions
	115 V AC	230 V AC	100 V AC	200 V AC	
Blue	Open circuit	230 V AC (neutral)	—	—	—
Brown	115 V AC (line)	230 V AC (line)	—	—	—
White	115 V AC (neutral)	Open circuit	—	—	—
Green/Yellow	Earth ground	Earth ground	Earth ground	Earth ground	—
Violet	CDRH loop	CDRH loop	CDRH loop	CDRH loop	CDRH loop
Red	—	—	100 V AC (line)	200 V AC (line)	—
Red	—	—	NC	200 V AC (neutral)	12 V DC
Yellow	—	—	100 V AC (neutral)	N/C	—
Black	—	—	—	—	Ground

Notes:

Other power supply solutions may be available for OEM applications. Contact your local Lumentum sales representative for more information. Model 1200 series lab style power supplies include emission indicator, key switch, keys, fusing, and detachable line cord. All 100 and 300 series power supply modules require appropriate fusing. Laser power supplies generate dangerous voltages and must be configured properly for safe operation. All power supplies carry a minimum of TÜV EN 60-950, UL1950, and CUL approvals. All products shipped standard with 12-inch high voltage cable, 12-inch input leads, and flying leads on inputs.

100 and 300 Series Power Supply Modules for Red HeNe Lasers

Model #	Input	For Operation of Laser Tubes and Heads																
		098-(0,2)	098-3	1001/3	1007/8	1018	1022	1025	1037	102-(3,4)	196-(2,4)	1101/3	1107/8	1122	1125	1135	1137	1144/45
101T-1250	DC	x			x								x					
101T-1700	DC		x	x		x				x	x	x						
101T-1800	DC						x							x				
101T-2300	DC							x	x						x		x	
314T-1250	AC	x			x								x					
314T-1700	AC		x	x		x				x	x	x						
314T-1800	AC						x							x				
314T-2300	AC							x	x						x		x	
380T-3100	AC															x		
380T-3800	AC																	x

1200 Series CDRH Laboratory Power Supplies for Red HeNe Lasers

Model #	Input	For Operation of Laser Heads																
		102-(3,4)	196-(2,4)	1101/3	1107/8	1122	1125	1135	1137	1144/45								
1201-(1,2,3)	AC	x	x	x														
1202-(1,2,3)	AC										x				x			
1205-(1,2,3)	AC						x											
1206-(1,2,3)	AC								x									
1216-(1,2,3)	AC												x					
1218-(1,2,3)	AC																	x

Warranty

Lumentum helium-neon laser systems are warranted to be free of defects in workmanship and materials for twelve months from the date of shipment.

Regulatory Compliance

The products listed in this data sheet comply to one or more of the following regulatory standards, and may display one or more of the safety labels shown below. Contact your local Lumentum sales representative for additional information on specific products or configurations.

Ordering Information

For more information on this or other products and their availability, please contact your local Lumentum account manager or Lumentum directly at customer.service@lumentum.com.

Description	Model	Part number
Power supply for HeNe, OEM module, DC2DC 12 VDC input, 1250 VDC/.004 A output	101T-1250	21105343
Power supply for HeNe, OEM module, DC2DC 12 VDC input, 1700 VDC/.0049 A output	101T-1700	21105422
Power supply for HeNe, OEM module, DC2DC 12 VDC input, 2300 VDC/.006 A output	101T-2300	21105424
Power supply for HeNe, OEM module, DC2DC 12 VDC input, 1250 VDC/.004 A output, 6" leads	103-1250	21105356
Power supply for HeNe, OEM module, DC2DC 12 VDC input, 1700 VDC/.0049 A output, 6" leads	103-1700	21105357
Power supply for HeNe, OEM module, DC2DC 12 VDC input, 2300 VDC/.006 A output, 6" leads	103-2300	21105358
Power supply for HeNe, OEM module, DC2DC 12 VDC input, 1800 VDC/.0065 A output	101T-1800	21105423
Power supply for HeNe, OEM module, DC2DC 12 VDC input 1700 VDC/.0049 output, 12" input, 6" output leads	111-1700	21105363
Power supply for HeNe, laboratory suply, AC2DC 115 VAC input, 1700 VDC/.0049 A output	1201-1	21105807
Power supply for HeNe, laboratory suply, AC2DC 230 VAC input, 1700 VDC/.0049 A output	1201-2	21105808
Power supply for HeNe, laboratory suply, AC2DC 100 VAC input, 1700 VDC/.0049 A output	1201-3	21105809
Power supply for HeNe, laboratory suply, AC2DC 115 VAC input, 2300 VDC/.006 A output	1202-1	21105810
Power supply for HeNe, laboratory suply, AC2DC 230 VAC input, 2300 VDC/.006 A output	1202-2	21105811
Power supply for HeNe, laboratory suply, AC2DC 100 VAC input, 2300 VDC/.006 A output	1202-3	21105812
Power supply for HeNe, laboratory suply, AC2DC 115 VAC input, 1250 VDC/.004 A output	1205-1	21105813
Power supply for HeNe, laboratory suply, AC2DC 230 VAC input, 1250 VDC/.004 A output	1205-2	21105814
Power supply for HeNe, laboratory suply, AC2DC 100 VAC input, 1250 VDC/.004 A output	1205-3	21105815
Power supply for HeNe, laboratory suply, AC2DC 115 VAC input, 1800 VDC/.0065 A output	1206-1	21105816
Power supply for HeNe, laboratory suply, AC2DC 230 VAC input, 1800 VDC/.0065 A output	1206-2	21105817
Power supply for HeNe, laboratory suply, AC2DC 100 VAC input, 1800 VDC/.0065 A output	1206-3	21105818
Power supply for HeNe, laboratory suply, AC2DC 115 VAC input, 3100 VDC/.0065 A output	1216-1	21105819
Power supply for HeNe, laboratory suply, AC2DC 230 VAC input, 3100 VDC/.0065 A output	1216-2	21105820
Power supply for HeNe, laboratory suply, AC2DC 100/200 VAC input, 3100 VDC/.0065 A output	1216-3	21105821
Power supply for HeNe, laboratory suply, AC2DC 115 VAC input, 3800 VDC/.0065 A output	1218-1	21105822
Power supply for HeNe, laboratory suply, AC2DC 230 VAC input, 3800 VDC/.0065 A output	1218-2	21105823
Power supply for HeNe, laboratory suply, AC2DC 100/200 VAC input, 3800 VDC/.0065 A output	1218-3	21105824
Power supply for HeNe, laboratory suply, AC2DC 115/230 VAC input, 1250 VDC/.004 A output	314T-1250	21105428
Power supply for HeNe, laboratory suply, AC2DC 100 VAC input, 1250 VDC/.004 A output	314T-1250 100V	21105377
Power supply for HeNe, laboratory suply, AC2DC 115/230 VAC input, 1700 VDC/.0049 A output	314T-1700	21105380
Power supply for HeNe, laboratory suply, AC2DC 100/200 VAC input, 1700 VDC/.0049 A output	314T-1700 100V	21105381
Power supply for HeNe, laboratory suply, AC2DC 115/230 VAC input, 1800 VDC/.0065 A output	314T-1800	21105385
Power supply for HeNe, laboratory suply, AC2DC 115/230 VAC input, 2300 VDC/.006 A output	314T-2300	21105430

Ordering Information (continued)

Description	Model	Part number
Power supply for HeNe, laboratory supply, AC2DC 100/200 VAC input, 2300 VDC/006 A output	314T-2300 100V	21105432
Power supply for HeNe, laboratory supply, AC2DC 115/230 VAC input, 2700 VDC/005 A output	314T-2700	21105388
Power supply for HeNe, laboratory supply, AC2DC 115/230 VAC input, 3100 VDC/0065 A output	380T-3100	21105435
Power supply for HeNe, laboratory supply, AC2DC 100/200 VAC input, 3100 VDC/0065 A output	380T-3100 100V	21105400
Power supply for HeNe, laboratory supply, AC2DC 115/230 VAC input, 3500 VDC/0065 A output	380T-3500	21105402
Power supply for HeNe, laboratory supply, AC2DC 115/230 VAC input, 3800 VDC/0065 A output	380T-3800	21105436
Power supply for HeNe, laboratory supply, AC2DC 100/200 VAC input, 3800 VDC/0065 A output	380T-3800 100V	21105403



North America
Toll Free: 844 810 LITE (5483)

Outside North America
Toll Free: 800 000 LITE (5483)

China
Toll Free: 400 120 LITE (5483)

© 2018 Lumentum Operations LLC
Product specifications and descriptions in this document are subject to change without notice.