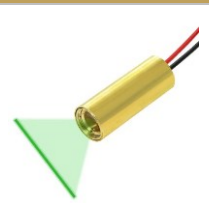
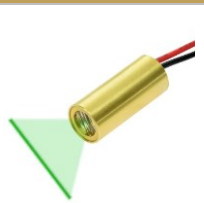
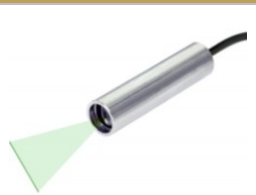
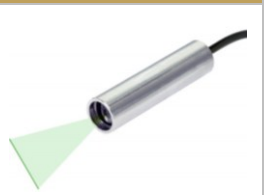
Green Line Laser Module

Specifications / Model Number	VLM-520-27 series	VLM-520-28 LPT	VLM-520-37 series	VLM-520-55 series	VLM-520-56 series	VLM-520-57 series (TTL)
						
Dimensions	Ø12.5 x 30 mm	Ø9 x 26 mm	(W)14 x (H)14 x (L)26 mm	Ø10 x 38 mm	Ø10 x 40 mm	Ø10 x 40 mm
Operating voltage	7~10 VDC	7~10 VDC	7~10 VDC	3~6 VDC	3~6 VDC	3~6 VDC
Operating current	Less than 80mA / 100mA	Less than 100mA	Less than 80mA / 120mA	Less than 200mA	Less than 80mA	Less than 80mA
Optical power	4~5mW / 9~10mW	Less than 4.5mW	4~5mW / 9~10mW	4~5mW / 9~10mW	Less than 10mW	Less than 10mW
Laser class	Class 1	Class 1	Class 1	Class 1	Class 1	Class 1
Wavelength	505~530nm	510~530nm	505~530nm	510~530nm	515~530nm	515~530nm
Collimating lens	Plastic lens	Plastic lens	Glass lens	Glass lens	Glass lens	Glass lens
Line lens	Plastic lens	Plastic lens	Glass lens	Glass lens	Glass lens	Glass lens
Beam shape	Line	Line	Line	Line	Line	Line
Laser Line width	Less than 3.5mm at 10M	1.2mm at 1M	2±1mm at 5M 4±1mm at 10M	3±0.5mm at 5M 6±0.5mm at 10M	Less than 1mm	Less than 1mm
Laser line straightness	40” (±1mm @5M)	80” (+/- 2mm @5M)	20" (± 1mm @10m)	4/1000(<1.6mm @400mm)	±4mm@1M	±4mm@1M
Emitting angle	More than 90°	More than 60°	More than 120°	More than 90°	5°, 10°, 15°, 20°, 30°, 45°, 60°, 110°	5°, 10°, 15°, 20°, 30°, 45°, 60°, 110°
Operating temp. range	+15°C ~+30°C	+15°C ~+30°C	-20°C ~ +50°C	-20°C ~+65°C	-20°C ~+60°C	-20°C ~+60°C
Storage temp. range	-20°C ~+65°C	-20°C ~+65°C	-40°C ~ +70°C	-20°C ~+85°C	-20°C ~+85°C	-20°C ~+85°C
Housing material	Brass	Brass	Aluminum	Aluminum	Stainless steel	Stainless steel
Potential of housing	VDD(+)	VDD(+)	Insulated	Insulated	Insulated	Insulated
Electrostatic discharge (ESD)	30KV	30KV	30KV	30KV	30KV	30KV
Moisture sensitivity level (MSL)	Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.
Wire type	1007-26AWG	1007-26AWG	1007-26AWG	1007-26AWG	2464 2-WIRE CABLE 26 AWG	2464 2-WIRE CABLE 26 AWG
Cable length	115±15mm	115±15mm	115±15mm	115±15mm	330±30mm	330±30mm
Mean time to failure (MTTF) 25°C	10000hrs	10000hrs	10000hrs	10000hrs	10000hrs	10000hrs
Application	General industrial alignment	Economic 3D scanner	Precision industrial alignment	Precision industrial alignment	Precision fine line for Automation, Machine vision and Medical	Precision fine line for Automation, Machine vision and Medical with modulation function
Suggestion work distance	Above 2 meters	0.3~1.8 meters / 1~6 feet	1~20 meters / 3~60 feet	1~20 meters / 3~60 feet	0~1.2 meters / 0~4 feet	0~1.2 meters / 0~4 feet

VLM-520-66 series	VLM-520-67 series (TTL)	VLM-520-75 series	VLM-POWELL series
			
M12 x 68 mm	M12 x 68 mm	Ø10 x 50 mm	Ø10 x 68 mm
10~36 VDC	10~36 VDC	3~6 VDC	3~6 VDC / 10~36 VDC
Less than 20mA at 24V	Less than 20mA at 24V	Less than 100mA	Less than 55mA
Less than 0.39mW / 7~9mW	Less than 0.39mW / 7~9mW	Less than 5mW	8±0.5mW
Class 1	Class 1	Class 1	Class 1
515~530nm	515~530nm	505~530nm	505~535nm
Glass lens	Glass lens	Glass lens	Glass lens
Glass lens	Glass lens	Glass lens	Glass lens
Line	Line	Line	Line
Less than 1mm	Less than 1mm	2 mm @ 0~5 meters 3.5 mm @ 10 meters	Less than 1mm
4/1000(<1.6mm @400mm)	4/1000(<1.6mm @400mm)		4/1000(<1.6mm @400mm)
5°, 15°, 30°, 60°, 110°	5°, 15°, 30°, 60°, 110°	120°	45°±5° / 75°±5°
-20°C ~+60°C	-20°C ~+60°C	-20°C ~+65°C	-20°C ~+60°C
-20°C ~+85°C	-20°C ~+85°C	-20°C ~+85°C	-20°C ~+85°C
Stainless steel	Stainless steel	Aluminum	Aluminum
Insulated	Insulated	Insulated	Insulated
30KV	30KV	30KV	30KV
Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.	Level 1 - acc to JEDEC J-STD-020E.
UL-2464/22 AWG	UL-2464/22 AWG	UL-2464/22AWG	UL-2464/22 AWG
UL2464 D4.2,L=2000±30mm	UL2464 D4.2,L=2000±30mm	D4.2,L=2000mm±30mm	D4.2,L=2000±30mm
10000hrs	10000hrs	10000hrs	10000hrs
Precision fine line for Automation, Machine vision and Medical	Precision fine line for Automation, Machine vision and Medical with modulation function	Wood, metal, stone processing and works that need precision fine laser line	Scanning, Image processing, Medical & Science, Automatic industry, Robotic arm
0~5 meters / 0~16 feet	0~5 meters / 0~16 feet	1 to 10 meters or beyond	