

Red Dot Laser Module

Specifications	Model Number	VLM-635-31 Series (TTL)	VLM-635-32 Series (TTL)	VLM-635-61 series (TTL)	VLM-650-62T series (TTL)	VLM-650-71 series (TTL)
						
Dimensions		Ø8 x 27 mm	Ø8.5 x 30.5 mm	Ø10 x 40 mm	Ø10 x 40 mm	M12 x 68 mm
Operating voltage		3~6 VDC	3~6 VDC	3~6 VDC	3~6 VDC	10~36 VDC
Operating current		Less than 40mA / 60mA	Less than 40mA / 60mA	Less than 40mA / 80mA	Less than 80mA / 100mA / 150mA	Less than 20mA at 24V
Laser power output		Less than 1mW / 4mW	Less than 1mW / 4mW	Less than 0.39mW / 1mW	0.2±0.1mW / 0.8±0.1mW / 3.5±0.5mW	Less than 0.39mW / 1mW
Laser class		Class 2 / Class 3R	Class 2 / Class 3R	Class 1 / Class 2	Class 1 / Class 2 / Class 3R	Class 1 / Class 2
Wavelength		630~645nm	630~645nm	630~645nm	645~665nm	645~665nm
Collimating lens		Glass lens	Glass lens	Glass lens	Glass lens	Glass lens
Output aperture		5mm	5mm	0.6mm	2mm	0.6mm
Beam shape		Ellipse	Ellipse	Circular	Circular	Circular
Spot size		5±1 mm at 10M	5±1 mm at 10M	Less than 1mm at 0~50cm Less than 2mm at 50~90cm	Less than Ø3mm at 0~5M	Less than 1mm at 0~50cm Less than 2mm at 50~90cm
Divergence (Full Angle)		Less than 0.4mRad	Less than 0.4mRad	Less than 0.4 mRad	Less than 0.4 mRad	Less than 0.4 mRad
Beam alignment		Less than 3°	Less than 3°	Less than 3°	Less than 3°	Less than 3°
Operating temp. range		-20°C ~ +60°C	-20°C ~ +60°C	-20°C ~+60°C	-20°C ~+60°C	-20°C ~+60°C
Storage temp. range		-40°C ~ +85°C	-40°C ~ +85°C	-20°C ~+85°C	-20°C ~+85°C	-20°C ~+85°C
Housing material		Aluminum	Steel	Stainless steel	Stainless steel	Stainless steel
Potential of housing		Insulated	Insulated	Insulated	Insulated	Insulated
Electrostatic discharge (ESD)		30KV	30KV	30KV / Arc protection	30KV / Arc protection	30KV / Arc protection
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.
Wire type		1007-26AWG	1007-26AWG	2464 3-WIRE CABLE 26 AWG	2464 3-WIRE CABLE 26 AWG	2464 3-WIRE CABLE 26 AWG
Cable length		115±15mm	115±15mm	330±30mm	330±30mm	330±30mm
Mean time to failure (MTTF) 25°C		10000hrs	10000hrs	10000hrs	10000hrs	10000hrs
Application		Modulation	Modulation	Industrial alignment with TTL modulation function	Industrial alignment with TTL modulation function	Industrial alignment with TTL modulation function
Suggestion work distance		1~10 meters / 3~40 feet	1~10 meters / 3~40 feet	0~1.2 meters / 0~4 feet	0~5 meters / 0~16 feet	0~1 meters / 0~3 feet

VLM-650-72T series (TTL)



M12 x 68 mm
10~36 VDC
Less than 30mA at 24V
0.2±0.1mW / 0.8±0.1mW / 3.5±0.5mW
Class 1 / Class 2 / Class 3R
645~665nm
Glass lens
2mm
Circular
Less than Ø3mm at 0~5M
Less than 0.4 mRad
Less than 3°
-20°C ~+60°C
-20°C ~+85°C
Stainless steel
Insulated
30KV / Arc protection
Level 1 - acc to JEDEC J-STD-020E.
2464 3-WIRE CABLE 26 AWG
330±30mm
10000hrs
Industrial alignment with TTL modulation function
0~5 meters / 0~16 feet