



The Focusable LINEMAN™ is equipped with a function to easily adjust the focal position of the line.

Characteristics

- Small Housing ($\phi 16 \times 45$ mm)
- Supports focal lengths **from 50 mm to 3000 mm**
- Stable quality by molding lens
- Built-in APC circuit
- Output Power adjustment
- Ideal illuminance uniformity ($< 10\%$) with proprietary lens design
- Stable linearity ($< 0.1\%$)
- Customizable by request

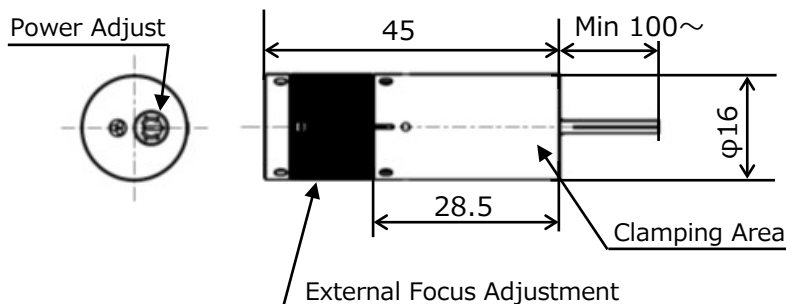


Focusable LINEMAN Standard Lineup

Custom options available.

Product Name	Wavelength	MAX Power	Fan Angle	Focal Distance	Line Length	Line Width	Input Volt	Remarks
	[nm]	[mW]	[degree]	[mm]	[mm]	[um]	[V]	
ALM-405175-XBB601	405	85	20	50~3000	18~1050	18~1080	12	APC Circuit
ALM-405175-XCB601			30		27~1600			
ALM-405175-XFB601			60		58~3450			
ALM-515010-XBD601	515	4.5	20		18~1050	31~1890		
ALM-515010-XCD601			30		27~1600			
ALM-515010-XFD601			60		58~3450			
ALM-520080-XBF601	520	35	20		18~1050	30~1800		
ALM-520080-XCF601			30		27~1600			
ALM-520080-XFF601			60		58~3450			
ALM-660200-XBB601	660	125	20		18~1050	20~1200	5	
ALM-660200-XCB601			30		27~1600			
ALM-660200-XFB601			60		58~3450			
ALM-660120-XBC601		50	20		18~1050	16~990		
ALM-660120-XCC601			30		27~1600			
ALM-660120-XFC601			60		58~3450			
ALM-783100-XBC601	783	40	20		18~1050	21~1250		
ALM-783100-XCC601			30		27~1600			
ALM-783100-XFC601			60		58~3450			

Package Dimension (unit : mm)



Wire Connections

Wire : 28AWG UL1571

Wire	Color	Signal	Function
1	Red	Vcc	Input voltage
2	Black	GND	
3	Green	TTL-Mod.*	ON : 4~5V、OPEN OFF : 0~0.8V

*) The TTL modulation frequency is up to 1 MHz.

Super Straight LINEMAN™



Super Straight LINEMAN (SSLINEMAN) generates an ideal top-hat beam with uniform illumination and exceptional straightness. In 3D measurements utilizing the optical cross-section method, its extremely precise linear straightness minimizes errors in image processing.

Characteristics

Line straightness:

LINEMAN
(Standard)

< 0.1%

vs

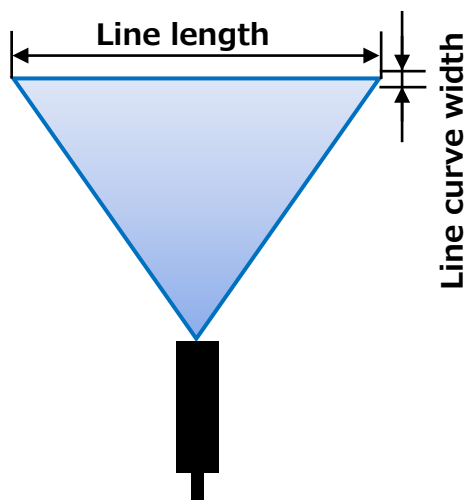
SS LINEMAN

< 0.02%



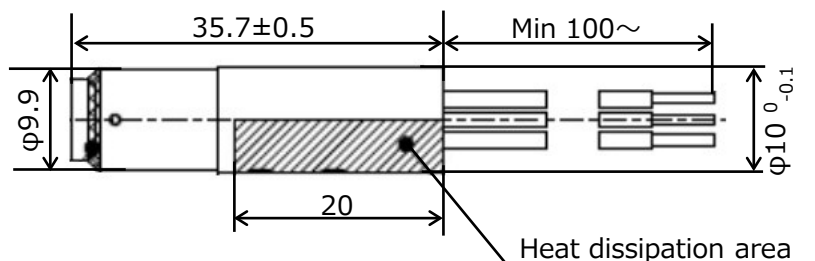
*Calculation method

$$\text{Line Straightness} = \frac{\text{Line curve width}}{\text{Line length}} \times 100[\%]$$



Line length	Line curve width	
	LINEMAN (Standard)	Super Straight LINEMAN
50 mm	< 0.05 mm	< 0.01 mm
100 mm	< 0.1 mm	< 0.02 mm
200 mm	< 0.2 mm	< 0.04 mm
500 mm	< 0.5 mm	< 0.10 mm
1000 mm	< 1.0 mm	< 0.20 mm

Package Dimension (unit : mm)



Wire Connections

Wire : 28AWG UL1571

Wire	Color	Signal	Function
1	Red	Vcc	Input voltage
2	Black	GND	
3	Green	TTL-Mod.*	ON : 4~5V, OPEN OFF : 0~0.8V

*) The TTL modulation frequency is up to 1 MHz.