

# **Industrial Laser System for Material Processing**

Activation Series - Laser Processing Heads



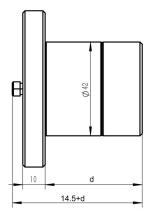
#### Features

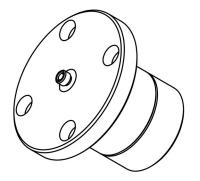
- Optimized beam shaping
- Perfect process tool for welding and soldering
- Safe process data transfer
- Individual software package

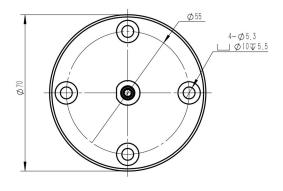
### **Applications**

- Material processing
- Laser annealing
- Laser reflow soldering
- Laser bonding
- Plastic welding
- · Laser non-contact heating

#### **Product Dimensions (mm)**







Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.



## **Product Specifications**

Product Code		ACT000029	ACT000036
Part No. <sup>1</sup>		LM-LPH-LD80-R-50-100	LM-LPH-SMA-R-50-5000
General Data	Unit	Value	
Housing Material	Onic	Anodized Aluminum	Anodized Aluminum
-	-	70 × 70 × 87	70 × 70 × 87
Dimensions (length × width × depth)	mm		
Mounting Threads (on both sides)	-	4 × M5	4 × M5
Fiber Connector Types	-	LD80	SMA905
Length d (shown in the picture)	mm	72.5	72.5
Optical Data			
Max. Laser Power (CW)	W	500	120
Wavelength Range	nm	790 - 990	790 - 990
Max. Numerical Aperture	-	0.23	0.23
Max. Fiber Core Diameter	μm	600	600
Transmission Rate	-	90% (typ. 95%)	90% (typ. 95%)
Collimation Focal Length	mm	50	50
Focusing Focal Length	mm	100	5000
Working Distance	mm	80 ± 10	5000
Beam Size FWHM with 200µm Fiber	μm	400	-
Beam Size (90% PE) with 200µm Fiber <sup>2</sup>	μm	560	-
Beam Size FWHM with 400µm Fiber	μm	800	-
Beam Size (90% PE) with 400µm Fiber <sup>2</sup>	μm	960	-
Max. Divergence with 200µm Fiber <sup>3</sup>	mrad	-	4
Max. Divergence with 400 $\mu m$ Fiber $^3$	mrad	-	8
Thermal Data			
	°C	5 ~ 40	5 ~ 40
Operating Temperature			
Storage Temperature	°C	15 ~ 50	15 ~ 50
Max. Housing Temperature in Operation	°C	60	60

<sup>1</sup>Part No. = Brand Code - Series - Fiber Connector Type - Beam Type - Collimation Focal Length - Focusing Focal Length <sup>2</sup> PE means power enclosed.

<sup>3</sup>FW 1/e<sup>2</sup>





## **Product Specifications**

Product Code		ACT000037	ACT000038
Part No. <sup>1</sup>		LM-LPH-SMA-R-A35-0	LM-LPH-LD80-R-35-0
General Data	Unit	Value	
Housing Material	-	Anodized Aluminum	Anodized Aluminum
Dimensions (length × width × depth)	mm	70 × 70 × 58	70 × 70 × 58
Mounting Threads (on both sides)	-	4 × M5	4 × M5
Fiber Connector Types	-	SMA905	LD80
Length d (shown in the picture)	mm	43.5	43.5
Optical Data			
Max. Laser Power (CW)	W	120	500
Wavelength Range	nm	790 - 990	790 - 990
Max. Numerical Aperture	-	0.23	0.23
Max. Fiber Core Diameter	μm	600	600
Transmission Rate	-	90% (typ. 95%)	90% (typ. 95%)
Collimation Focal Length	mm	35	35
Focusing Focal Length	mm	-	-
Working Distance	mm	-	-
Beam Size FWHM with 200 $\mu m$ Fiber	μm	-	-
Beam Size (90% PE) with 200 $\mu$ m Fiber $^2$	μm	-	-
Beam Size FWHM with 400µm Fiber	μm	-	-
Beam Size (90% PE) with 400 $\mu$ m Fiber $^2$	μm	-	-
Max. Divergence with 200µm Fiber <sup>3</sup>	mrad	7	8
Max. Divergence with 400 $\mu m$ Fiber $^3$	mrad	12	14
Thermal Data			
Operating Temperature	°C	5 ~ 40	5 ~ 40
Storage Temperature	°C	15 ~ 50	15 ~ 50
Max. Housing Temperature in Operation	°C	60	60

<sup>1</sup>Part No. = Brand Code - Series - Fiber Connector Type - Beam Type - Collimation Focal Length - Focusing Focal Length <sup>2</sup> PE means power enclosed.

<sup>3</sup>FW 1/e<sup>2</sup>



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