

# **Industrial Laser System for Material Processing**

# **Activation Series - Laser Process Heads**



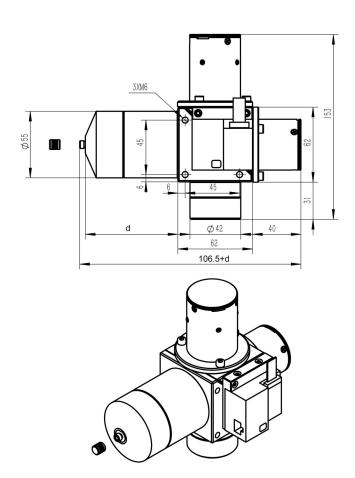
#### **Features**

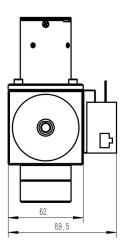
- Optimized beam shaping
- Perfect process tool for welding and soldering
- Safe process data transfer
- · Individual software package

#### **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 Code		ACT000031	ACT000048
Part No. <sup>1</sup>		LM-LPH-SMA-LH-10×2-175	LM-LPH-LD80-LH-10×2-175
General Data	Unit	Value	
Housing Material	-	<b>Anodized Aluminum</b>	Anodized Aluminum
Dimensions (length × width × depth)	mm	143 × 93 × 62	143 × 93 × 62
Mounting Threads (on both sides)	-	3 × M6	3 × M6
Fiber Connector Types	-	SMA905	LD80
Length d (shown in the picture)	mm	76.5	76.5
Weight	g	1450	1450
Optical Data			
Max. Laser Power (CW)	W	120	500
Wavelength Range	nm	790 - 990	790 - 990
Max. Numerical Aperture	-	0.22	0.22
Max. Fiber Core Diameter	μm	400	400
Transmission Rate	-	90% (typ. 95%)	90% (typ. 95%)
Collimation Focal Length	mm	30	30
Focusing Focal Length	mm	175	175
Working Distance	mm	167 ± 10	167 ± 10
Line Length X-direction TopHat FWHM	mm	$12.0 \pm 1.0$	12.0 ± 1.0
Line Length Y-direction Gauss FWHM	mm	$1.6 \pm 0.2$	1.6 ± 0.2
Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))	-	95%	95%
Thermal Data			
Operating Temperature	°C	5 ~ 40	5 ~ 40
Storage Temperature	°C	15 ~ 50	15 ~ 50
Max. Housing Temperature in Operation	°C	60	60
Pyrometer Control Data			
Detection Wavelength	nm	-	-
Temperature Measurement Range	°C	-	-
Sampling Rate (standard)	kHz	-	-
Calibration Standard Type	-	-	-
Power Monitoring Data			
Wavelength Range	nm	-	-
Sampling Rate (standard)	kHz	-	-
Operating Temperature Range	°C	-	-
Measurement Accuracy	%	-	-
Interfaces Data			
Interface Type	-	-	-
Data Cable Type	-	-	-
Socket Type	-	-	-
Communication Protocol of Laser Driver	-	-	-
Software			
Process Software	-	-	-

Part No. = Brand Code - Series - Fiber Connector Type - Beam Type - Beam Size - Focusing Focal Length - Structure Type





Cemeral Data	Product Code		ACT000049	ACT000066
Housing Material   -	Part No. 1		LM-LPH-SMA-LH-10×10-175	LM-LPH-LD80-LH-10×10-175
Dimensions (length × width × depth)         mm         143 × 93 × 62         143 × 93           Mounting Threads (on both sides)         -         3 × M6         3           Eiber Connector Types         -         SMA905         4           Length of (shown in the picture)         mm         76.5         4           Weight         g         1500         4           Optical Date           Wax Laser Power (CW)         W         120         7           Wavelength Range         nm         790 -990         790           Max. Numerical Aperture         -         0.22         4           Max. Fiber Core Diameter         µm         400         4           Transmission Rate         -         90% (typ.) 95%)         90% (typ.) 90% (	General Data	Unit	Value	
Mounting Threads (on both sides)	Housing Material	-	Anodized Aluminum	Anodized Aluminum
Fiber Connector Types	Dimensions (length × width × depth)	mm	143 × 93 × 62	143 × 93 × 62
Length d (shown in the picture)         mm         76.5 weight           Weight         g         1500           Optical Data         Secondary (CW)         W         120           Max Laser Power (CW)         W         120         790           Max Laser Power (CW)         W         120         790           Max Riber Core Diameter         -         0.22         790           Max. Fiber Core Diameter         µm         400         90% (typ. 95%)         90% (typ. 95%)         90% (typ. 170)         100	Mounting Threads (on both sides)	-	3 × M6	3 × M6
Optical Data         W         120           Max. Laser Power (CW)         W         120           Wavelength Range         nm         790-990         790           Max. Numerical Aperture         -         0.22           Max. Fiber Core Diameter         µm         400           Transmission Rate         -         90% (typ. 95%)         90% (typ. Collimation Focal Length           Collimation Focal Length         mm         30         90% (typ. Collimation Focal Length)           Working Distance         mm         167 ± 10         16         17         10<	Fiber Connector Types	-	SMA905	LD80
Optical Data           Max. Laser Power (CW)         W         120           Wavelength Range         nm         790 - 990         790           Max. Numerical Aperture         -         0.22           Max. Fiber Core Diameter         µm         400           Transmission Rate         -         90% (typ. 95%)         90% (typ. Collimation Focal Length Procedure)           Collimation Focal Length         mm         30         Focusing Focal Length         mm         167 ± 10         16         Line Length Y-direction TopHat FWHM         mm         167 ± 10         12.0         12.0         Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         Mm         12.0 ± 1.0         12.0         Line Length Y-direction TopHat FWHM         Mm <td>Length d (shown in the picture)</td> <td>mm</td> <td>76.5</td> <td>76.5</td>	Length d (shown in the picture)	mm	76.5	76.5
Max. Laser Power (CW)         W         120           Wavelength Range         nm         790-990         790           Max. Numerical Aperture         -         0.22         2           Max. Fiber Core Diameter         µm         400         400           Transmission Rate         -         90% (typ. 95%)         90% (typ. Collimation Focal Length           Working Distance         mm         167 ± 10         16           Line Length X-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction (1- (Imax - Imin) / (Imax - Imin))         -         95%           Thermal Data           Operating Temperature         °C         5 ~ 40         5           Storage Temperature         °C         5 ~ 40         5           Max. Housing Temperature in Operation         °C         5 ~ 40         5           Max. Housing Temperature in Operation         °C         5 ~ 40         5           Detection Wavelength         nm         -         -           Temperature Measurement Range         °C         -         -	Weight	g	1500	1500
Wavelength Range         nm         790-990         790           Max. Numerical Aperture         -         0.22         Avanuarical Aperture         -         0.22         Avanuarical Aperture         -         0.22         Avanuarical Aperture         -         0.22         Avanuarical Aperture         -         0.00         4         -         0.00         4         -         0.00         (typ. 10         0.00	Optical Data			
Max. Numerical Aperture         -         0.22           Max. Fiber Core Diameter         µm         400           Transmission Rate         -         90% (typ. 95%)         90% (typ. 50%)           Collimation Focal Length         mm         30         600           Focusing Focal Length         mm         175         16           Working Distance         mm         167 ± 10         16           Line Length X-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Line Length Y-direction (1 - (lmax - lmin) / (lmax - lmin))         -         95%         -           Therefore In Color OpHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction (1 - (lmax - lmin) / (lmax - lmin))         -         95%         -           Therefore In Color OpHate FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction (1 - (lmax - lmin) / (lmax - lmin))         -         5         40         5         5         40         5         5         40         5         5         40         5         5         40         5         5 <td< td=""><td>Max. Laser Power (CW)</td><td>W</td><td>120</td><td>500</td></td<>	Max. Laser Power (CW)	W	120	500
Max. Fiber Core Diameter         μm         400           Transmission Rate         -         90% (typ. 95%)         90% (typ. 20%)           Collimation Focal Length         mm         30           Focusing Focal Length         mm         175           Working Distance         mm         167 ± 10         16           Line Length X-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction (1- (Imax - Imin) / (Imax - Imin))         -         95%         -           Thermal Data           Coperating Temperature         °C         5 ~ 40         5         5           Thermal Data         °C         5 ~ 40         5         5         40         5         5         40         5         5         40         5         5         40         5         5         40         5         5         40         5         5         40         5         5         40         5         5         40         5         4         5         5	Wavelength Range	nm	790 - 990	790 - 990
Transmission Rate         -         90% (typ. 95%)         90% (typ. Collimation Focal Length           Collimation Focal Length         mm         30           Focusing Focal Length         mm         175           Working Distance         mm         167±10         16           Line Length X-direction TopHat FWHM         mm         12.0±1.0         12.0           Line Length Y-direction TopHat FWHM         mm         12.0±1.0         12.0           Uniformity of X-direction (1- (imax - imin) / (imax - imin))         -         95%         -           Thermal Data           Operating Temperature         °C         5 - 40         5           Storage Temperature         °C         15 - 50         15           Max. Housing Temperature in Operation         °C         60         15           Max. Housing Temperature Ange         °C         5 - 40         5           Pyrometer Control Data           Detection Wavelength         nm         -         -           Temperature Measurement Range         °C         -         -           Power Monitoring Data           Wavelength Range         nm         -         -	Max. Numerical Aperture	-	0.22	0.22
Collimation Focal Length         mm         30           Focusing Focal Length         mm         175           Working Distance         mm         167±10         16           Line Length X-direction TopHat FWHM         mm         12.0±1.0         12.0           Line Length Y-direction TopHat FWHM         mm         12.0±1.0         12.0           Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))         -         95%           Thermal Data           Coperating Temperature         °C         5 ~ 40         5           Storage Temperature         °C         15 ~ 50         15           Max. Housing Temperature in Operation         °C         60         5           Pyrometer Control Data           Detection Wavelength         nm         -         -           Temperature Measurement Range         °C         -         -           Sampling Rate (standard)         kHz         -         -           Calibration Standard Type         nm         -         -           Power Monitoring Data         Hz         -         -           Wavelength Range         °C         -         - <td>Max. Fiber Core Diameter</td> <td>μm</td> <td>400</td> <td>400</td>	Max. Fiber Core Diameter	μm	400	400
Focusing Focal Length         mm         175           Working Distance         mm         167±10         16           Line Length X-direction TopHat FWHM         mm         12.0±1.0         12.0           Line Length Y-direction TopHat FWHM         mm         12.0±1.0         12.0           Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))         -         95%           Thermal Data           Operating Temperature         °C         5 ~ 40         5           Storage Temperature         °C         15 ~ 50         15           Max. Housing Temperature in Operation         °C         60         5           Pyrometer Control Data           Detection Wavelength         nm         -         <	Transmission Rate	-	90% (typ. 95%)	90% (typ. 95%)
Working Distance         mm         167 ± 10         16           Line Length X-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))         -         95%           Thermal Data           Operating Temperature         °C         5 ~ 40         5           Storage Temperature         °C         15 ~ 50         15           Max. Housing Temperature in Operation         °C         60         15           Pyrometer Control Data           Detection Wavelength         nm         -         -           Temperature Measurement Range         °C         -         -           Sampling Rate (standard)         kHz         -         -           Calibration Standard Type         -         -         -           Power Monitoring Data           Wavelength Range         nm         -         -           Sampling Rate (standard)         kHz         -         -           Operating Temperature Range         °C         -         - <td>-</td> <td>mm</td> <td>30</td> <td>30</td>	-	mm	30	30
Line Length X-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))         -         95%           Thermal Data           Operating Temperature         °C         5 - 40         5           Storage Temperature         °C         15 - 50         15           Max. Housing Temperature in Operation         °C         60         15           Pyrometer Control Data           Detection Wavelength         nm         -         -           Temperature Measurement Range         °C         -         -           Power Monitoring Data         HHz         -         -           Wavelength Range         nm         -         -           Sampling Rate (standard)         kHz         -         -           Operating Temperature Range         °C         -         -           Measurement Accuracy         %         -         -           Interface Data           Interface Type         -         -         - <td>•</td> <td>mm</td> <td>175</td> <td>175</td>	•	mm	175	175
Line Length Y-direction TopHat FWHM         mm         12.0 ± 1.0         12.0           Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))         -         95%           Thermal Data           Operating Temperature         °C         5 ~ 40         5           Storage Temperature         °C         15 ~ 50         15           Max. Housing Temperature in Operation         °C         60         15           Pyrometer Control Data           Detection Wavelength         nm         -         -         -           Temperature Measurement Range         °C         -         -         -           Sampling Rate (standard)         kHz         -         -         -           Calibration Standard Type         -         -         -         -         -         -           Power Monitoring Data           Wavelength Range         nm         -	Working Distance	mm		167 ± 10
Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))   -     95%     95%	Line Length X-direction TopHat FWHM	mm	$12.0 \pm 1.0$	12.0 ± 1.0
Thermal Data Operating Temperature	Line Length Y-direction TopHat FWHM	mm	$12.0 \pm 1.0$	12.0 ± 1.0
Operating Temperature         °C         5 ~ 40         5 5 50         15 50 </td <td>Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))</td> <td>-</td> <td>95%</td> <td>95%</td>	Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))	-	95%	95%
Storage Temperature °C 15 ~ 50 15 Max. Housing Temperature in Operation °C 60 15 ~ 50 15 Max. Housing Temperature in Operation °C 60 15 ~ 60 15 Max. Housing Temperature in Operation °C 60 15 ~ 60 15 Max. Housing Temperature Measurement Range 70 70 70 70 70 70 70 70 70 70 70 70 70				
Max. Housing Temperature in Operation  **C**  **Pyrometer Control Data**  Detection Wavelength  **Independent Range**  **Pocal Beautiful Range**  **Power Measurement Range**  **Power Monitoring Data**  Wavelength Range**  **Wavelength Range**  **Power Monitoring Data**  Wavelength Range**  **Poperature Range**  **Operating Temperature Range**  **Operating Temperature Range**  **Power Measurement Accuracy**  **Note: The Communication Protocol of Laser Driver**  **Operating Temperature Range**  **Interface Type**  **Operating Temperature Range**  **Operatin	Operating Temperature		5 ~ 40	5 ~ 40
Pyrometer Control Data  Detection Wavelength nm	Storage Temperature		15 ~ 50	15 ~ 50
Detection Wavelength nm - Temperature Measurement Range °C - Sampling Rate (standard) kHz - Calibration Standard Type - Calibration Standard Type -  Power Monitoring Data  Wavelength Range nm - Sampling Rate (standard) kHz - Sampling Rate (standard) kHz - Operating Temperature Range °C - Measurement Accuracy % -  Interfaces Data  Interface Type - Data Cable Type - Socket Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type - Communication Protocol of Laser Driver -  Interface Type -  Interfac	Max. Housing Temperature in Operation	°C	60	60
Temperature Measurement Range  C Sampling Rate (standard)  kHz Calibration Standard Type  -  Power Monitoring Data  Wavelength Range  nm - Sampling Rate (standard)  kHz - Coperating Temperature Range  C Measurement Accuracy  N  Interfaces Data  Interface Type  Data Cable Type  Socket Type  C Communication Protocol of Laser Driver  -  C  RHz  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  -  C  C	Pyrometer Control Data			
Sampling Rate (standard)			-	-
Calibration Standard Type	Temperature Measurement Range	°C	-	-
Power Monitoring Data  Wavelength Range nm - Sampling Rate (standard) kHz - Operating Temperature Range °C - Measurement Accuracy % -  Interfaces Data  Interface Type - Data Cable Type - Socket Type - Communication Protocol of Laser Driver -  Interface Driver -  Communication Protocol of Laser Driver	. •	kHz	-	-
Wavelength Rangenm-Sampling Rate (standard)kHz-Operating Temperature Range°C-Measurement Accuracy%-Interfaces DataInterface TypeData Cable TypeSocket TypeCommunication Protocol of Laser Driver	Calibration Standard Type	-	-	-
Sampling Rate (standard)  Negreting Temperature Range  C  Measurement Accuracy  Negreting Temperature Range  C  Measurement Accuracy  Negreting Temperature Range  -  Interfaces Data  Interface Type  -  Data Cable Type  -  Socket Type  -  Communication Protocol of Laser Driver  -  Sommunication Protocol of Laser Driver  -  -  -  -  -  -  -  -  -  -  -  -  -	Power Monitoring Data			
Operating Temperature Range Measurement Accuracy  ***  Interfaces Data  Interface Type Interface	Wavelength Range	nm	-	-
Measurement Accuracy % -  Interfaces Data Interface Type Data Cable Type Socket Type Communication Protocol of Laser Driver	. •		-	-
Interfaces Data Interface Type Data Cable Type Socket Type Communication Protocol of Laser Driver		°C	-	-
Interface Type	Measurement Accuracy	%	-	-
Data Cable Type	Interfaces Data			
Socket Type Communication Protocol of Laser Driver	• •	-	-	-
Communication Protocol of Laser Driver	• •	-	-	-
	• •	-	-	-
	Communication Protocol of Laser Driver	-	-	-
Software	Software			
Process Software	Process Software	-	-	-

Part No. = Brand Code - Series - Fiber Connector Type - Beam Type - Beam Size - Focusing Focal Length - Structure Type





Product Code Part No. 1		<b>ACT000040</b> LM-LPH-SMA-LH-10×2-175-PM	<b>ACT000041</b> LM-LPH-LD80-LH-10×2-175-PM
Partino.		LIVI-LPH-SIVIA-LH-1U^2-1/3-PIVI	LWI-LPH-LD60-LH-10^2-1/3-PW
General Data	Unit	Value	
Housing Material	-	Anodized Aluminum	Anodized Aluminum
Dimensions (length × width × depth)	mm	183 × 153 × 89.5	183 × 153 × 89.5
Mounting Threads (on both sides)	-	3 × M6	3 × M6
Fiber Connector Types	-	SMA905	LD80
Length d (shown in the picture)	mm	76.5	76.5
Weight	g	1550	1550
Optical Data			
Max. Laser Power (CW)	W	120	500
Wavelength Range	nm	790 - 990	790 - 990
Max. Numerical Aperture	-	0.22	0.22
Max. Fiber Core Diameter	μm	400	400
Transmission Rate	' -	90% (typ. 95%)	90% (typ. 95%)
Collimation Focal Length	mm	30	30
Focusing Focal Length	mm	175	175
Working Distance	mm	167 ± 10	167 ± 10
Line Length X-direction TopHat FWHM	mm	12.0 ± 1.0	12.0 ± 1.0
Line Length Y-direction Gauss FWHM	mm	1.6 ± 0.2	1.6 ± 0.2
Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))	-	95%	95%
Thermal Data			
Operating Temperature	°C	5 ~ 40	5 ~ 40
Storage Temperature	°C	15 ~ 50	15 ~ 50
Max. Housing Temperature in Operation	°C	60	60
Pyrometer Control Data			
Detection Wavelength	nm	1100 - 2100	1100 - 2100
Temperature Measurement Range	°C	120 - 400	120 - 400
Sampling Rate (standard)	kHz	1	1
Calibration Standard Type	-	Black Body	Black Body
Power Monitoring Data			
Wavelength Range	nm	800 - 1000	800 - 1000
Sampling Rate (standard)	kHz	1	1
Operating Temperature Range	°C	15 - 40	15 - 40
Measurement Accuracy	%	0.2	0.2
Interfaces Data			
Interface Type	-	Ethernet	Ethernet
Data Cable Type	-	CAT5	CAT5
Socket Type	-	RJ45	RJ45
Communication Protocol of Laser Driver	-	CAN- / Profi - Bus	CAN- / Profi - Bus
Software			
Process Software	-	4PL Plus	4PL Plus

Part No. = Brand Code - Series - Fiber Connector Type - Beam Type - Beam Size - Focusing Focal Length - Structure Type





Product Code		ACT000050	ACT000042
Part No. <sup>1</sup>		LM-LPH-SMA-LH-10×10-175-PM	LM-LPH-LD80-LH-10×10-175-PM
General Data	Unit	Value	
Housing Material	-	Anodized Aluminum	Anodized Aluminum
Dimensions (length × width × depth)	mm	183 × 153 × 89.5	183 × 153 × 89.5
Mounting Threads (on both sides)	-	3 × M6	3 × M6
Fiber Connector Types	-	SMA905	LD80
Length d (shown in the picture)	mm	76.5	76.5
Weight	g	1600	1600
Optical Data			
Max. Laser Power (CW)	W	120	500
Wavelength Range	nm	790 - 990	790 - 990
Max. Numerical Aperture	-	0.22	0.22
Max. Fiber Core Diameter	μm	400	400
Transmission Rate	-	90% (typ. 95%)	90% (typ. 95%)
Collimation Focal Length	mm	30	30
Focusing Focal Length	mm	175	175
Working Distance	mm	167 ± 10	167 ± 10
Line Length X-direction TopHat FWHM	mm	12.0 ± 1.0	12.0 ± 1.0
Line Length Y-direction TopHat FWHM	mm	12.0 ± 1.0	12.0 ± 1.0
Uniformity of X-direction (1 - (Imax - Imin) / (Imax - Imin))	-	95%	95%
Thermal Data			
Operating Temperature	°C	5 ~ 40	5 ~ 40
Storage Temperature	°C	15 ~ 50	15 ~ 50
Max. Housing Temperature in Operation	°C	60	60
Pyrometer Control Data			
Detection Wavelength	nm	1100 - 2100	1100 - 2100
Temperature Measurement Range	°C	120 - 400	120 - 400
Sampling Rate (standard)	kHz	1	1
Calibration Standard Type	-	Black Body	Black Body
Power Monitoring Data			
Wavelength Range	nm	800 - 1000	800 - 1000
Sampling Rate (standard)	kHz	1	1
Operating Temperature Range	°C	15 - 40	15 - 40
Measurement Accuracy	%	0.2	0.2
Interfaces Data			
Interface Type	-	Ethernet	Ethernet
Data Cable Type	-	CAT5	CAT5
Socket Type	-	RJ45	RJ45
Communication Protocol of Laser Driver	-	CAN- / Profi - Bus	CAN- / Profi - Bus
Software			
Process Software	-	4PL Plus	4PL Plus

Part No. = Brand Code - Series - Fiber Connector Type - Beam Type - Beam Size - Focusing Focal Length - Structure Type



Rev 04 | Updated January 10, 2022