

Coaxial Lights

MSU series

Refer to our website for product details.



You can also use your smartphone or cell phone.

For quick access.

Provides light with high parallelism using original lighting technology



Applications Inspection for fine damage on glossy surfaces, character recognition on glossy surfaces, etc.

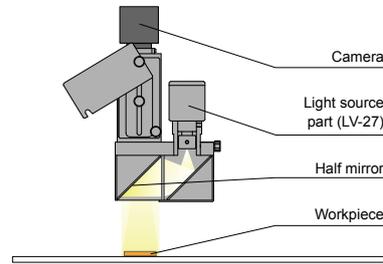
Features

Provides collimated lighting created using a special lens. It is perfect for extracting tiny scratches, damage, or dents on mirror surfaces. The included lens can be used for convergent light.

We accept custom orders. Please feel free to inquire.

- Shape modifications
- Brightness increases
- Changes in wavelength, etc.

Example configuration (MSU-10)



Imaging example: Exterior imaging of button cell batteries



LED Coaxial Light



With the Coaxial Light, it is possible to reduce surface reflection and form an image of the engraved text.

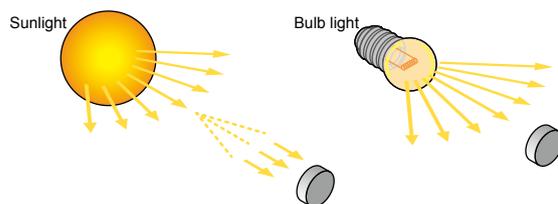
MSU-30X20RD2



Not only is the image of the engraved text more clear than with the Coaxial Light, fine differences in the surface can also be imaged.

Collimated light optical unit MSU series

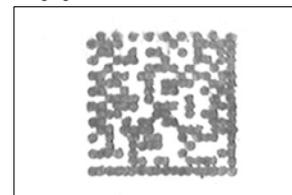
Light illuminated from a normal light source moves in a straight line while radially diffusing. Collimated light refers to light where one point of light illuminated from a source at infinitely far distance, such as the sun, hits any surface from the same angle. The MSU series is an optical unit developed by applying the principle of collimated light.



Extracts damage, scratches, and dents on mirror workpieces

This optical unit is effective for inspections that were difficult using conventional image processing, such as extracting shallow and tiny scratches, damage and dents, and reading barcodes on mirror workpieces.

Imaging of 2-dimensional code



Using an LED Light allows for high performance, stable, and low-cost imaging. This is an applied product that melds lighting technology design with optical design.

For details about the procedure for usage, refer to the material "How to Use the MSU Series" on our website. You can download this information from the product website page.

Various technical documents available.

- PDF Drawings
- DXF Drawings
- 3D CAD
- Instruction Guides
- Product Filers
- Imaging Samples
- Data Sheets
- Examples of Custom Ordered Products

Download here. <http://www.ccs-grp.com/dl/>

Lineup

Model name	LED color	Power consumption	Peak wavelength/ correlated color temperature	Options	Extension cables	Recommended Control Units	Weight
MSU-10RD2	Red	24 V / 0.8 W	630 nm	-	FCB ⁴ Straight Cable FCB-W 2-branch Cable FCB-F 4-branch Cable FRCB Robot Cable	PD3 CC-ST-1024 PSB POD ³	275 g
MSU-10SW2	White	24 V / 0.4 W	5,500 K				
MSU-10BL2	Blue	24 V / 0.4 W	470 nm			PD3 ¹ CC-ST-1024 PSB POD ³	2,000 g
MSU-30RD2	Red	24 V / 0.8 W	630 nm				
MSU-30BL2	Blue	24 V / 0.4 W	470 nm			PD3 ¹ CC-ST-1024 PSB POD ³	540 g
MSU-30X20RD2 ^{*1}	Red	24 V / 0.8 W	630 nm				
MSU-30X20SW2	White	24 V / 0.5 W	5,500 K			PD3 CC-ST-1024 PSB POD ³	9,920 g
MSU-30X20BL2	Blue	24 V / 0.5 W	470 nm				
MSU-30X20GR2	Green	24 V / 0.5 W	525 nm			PD3 ² CC-ST-1024 PSB ² POD ³	12,700 g
MSU-100RD2	Red	24 V / 0.8 W	630 nm				
MSU-100SW2	White	24 V / 0.4 W	5,500 K			PD3 ² CC-ST-1024 PSB ² POD ³	13,000 g
MSU-130RD2	Red	24 V / 0.8 W	630 nm				
MSU-130SW2-CL	White	24 V / 0.4 W 24 V / 4.6 W	5,500 K				

LED Properties: Spectral Distribution ► P.290

Extension Cables ► P.280

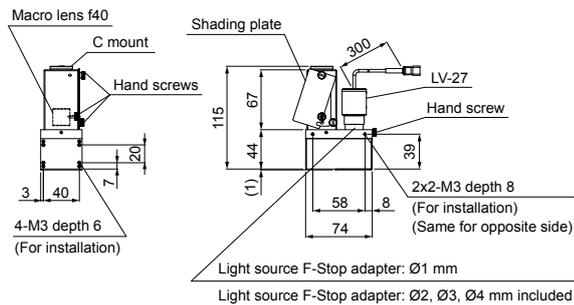
Control Unit Selection Guide ► P.229

List of Control Unit Specifications ► P.231

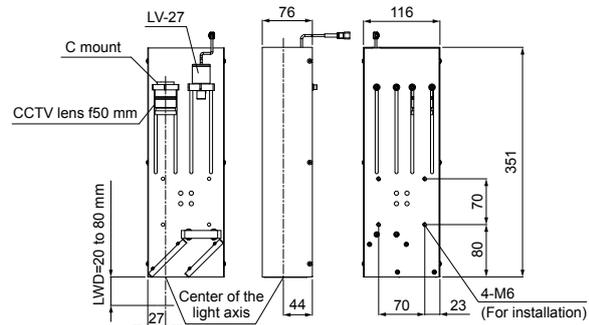
^{*1} This red light cannot be used with the PD3-5024-4-SI(A) or PD3-5024-4-ET(A) Control Unit.^{*2} The MSU-130SW2-CL is equipped with two Light Units. Use a 2-channel Control Unit.^{*3} For information on the combination of Light Units and POD-series Control Unit, please refer to our website. <http://www.ccs-grp.com/lnk/qr/pond>

Dimensions (mm)

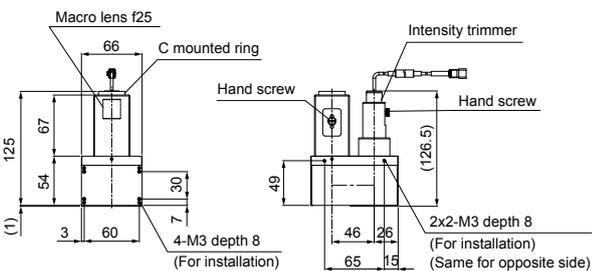
MSU-10RD2/SW2/BL2



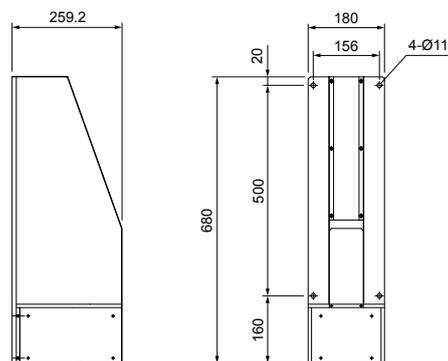
MSU-30RD2/BL2



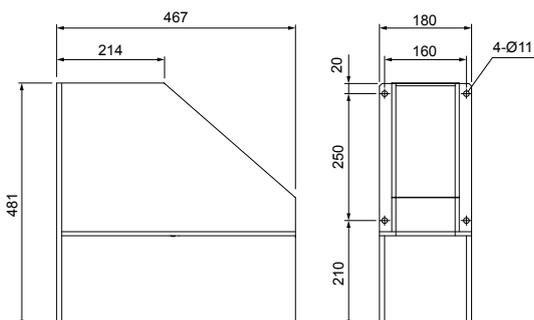
MSU-30X20RD2/SW2/BL2/GR2



MSU-100RD2/SW2



MSU-130RD2/SW2-CL


Reference chart for the field of vision (Estimate)
 Using a 1/3 inch sensor camera

Model name	Field of vision	WD
MSU-10	7.5 mm	58 mm
MSU-30	18.7 mm	50 mm
MSU-30X20	15 mm	24 mm
MSU-100	60 mm	50 mm

Regarding reference field of vision
This is an estimate to help you select a Light Unit, and individual units may vary from the data listed above depending on your imaging conditions.

You can change the connectors of the Light Unit cable. Choose between M12 connectors and flying leads. Refer to P.5 for details.

You can inquire using
our website.

Requests for
Light Unit
Selection

Requests for
Loan
Products

Requests for
Estimates

Requests for
a Catalog

Product
Inquiries

Other
Inquiries

Inquire on our website here.
<http://www.ccs-grp.com/contact/>

Direct Lighting	LDR2
	LDR2-LA
	LDR-LA1
	SQR
	SQR-TP
Diffused Lighting	HPR2
	LFR
	LKR
	FPR
	FPQ2
Direct Lighting	LDL2
	LDLB
	HLDL2
	HL
	TH2 (5 types)
	TH
	LFL
Diffused Lighting	HPD2
	LDM2
	LAV
	PDM
	LFX3
	LFX3-PT
	LFX2
	LFV3
Collimated Lighting	MSU
	MFU
Strobe Lighting	PF
Water-proof	HLDR-IP/ IQ/HSL-PCL
	UV2
Ultraviolet Lighting	UV
	LNSP-UV-FN
Infrared Lighting	IR2
Intensity Control	IU
Spot Lighting, Etc.	HLV2
	LV
	LSP
	HFS/HFR
	HLV2-NR
	HLV2-3M-RGB-3W
	PFBR
	PFB2
Convergent Lighting	LNLP
	LNSP2
	LNSP
	Coaxial Units
	LNSP-FN
	LN/LN-HK
Diffused Lighting	LNSD
	LND2
	HLND
	LT
	LNV/HLDN
Oblique Angled Lighting	LNDG
	LNIS
	LNIS-FN
Lenses	Telecentric Lens
	Macro Lens