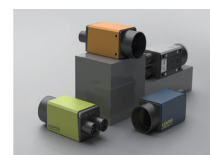


# Product manual of Leaper Machine Vision Components

Specialized in machine vision industrial inspection solutions, LEAPER provides machine vision solutions for in-process product quality monitoring, production process traceability, manufacturing process optimization and high-precision mechanical positioning guidance, based on the core technologies of our integrated development platform consisting of optical imaging systems, machine vision algorithms and graphical algorithms. For now we have already developed several AOI modules in Photovoltaic, Li-ion Battery, Semiconductors, New Materials, Laser and Logistics. Therefore, we can also provide cost-effective and high image quality one-step AOI components including Cameras, Lenses, Light Sources, Image Acquisition Board and IPC.

## Camera

**Series:** area and line scan cameras  
**Resolution:** 130W/500W/600W/1200W/4K  
**Data interface:** GigE/USB3.0/Cameralink  
**Applications:** photovoltaic, new materials, semiconductor, logistics



### Technical Parameters

Type	Model	Resolution	Sensor/Pixel Size	Shutter	Frame/Line Rate	Lens Mount	Spectrum	Interface
Area Scan Camera	LP-OCM-G013GM	1280 × 1024	1/2"	Global	92.8fps	C-Mount	Mono	GigE
Area Scan Camera	LP-OCM-G050GM/C	2448 × 2048	2/3"	Global	24fps	C-Mount	Mono/Color	GigE
Area Scan Camera	LP-OCM-R060GM/C	3072 × 2048	1/1.8"	Rolling	18fps	C-Mount	Mono/Color	GigE
Area Scan Camera	LP-OCM-R120GC	4000 × 3000	1/1.7"	Rolling	9fps	C-Mount	Color	GigE
Area Scan Camera	LP-OCM-R120U3C	4000 × 3000	1/1.7"	Rolling	30fps	C-Mount	Color	USB3.0
Area Scan Camera	LP-OCM-G120GM	4096 × 3000	1.1"	Global	9fps	C-Mount	Mono	GigE
Line Scan Camera	LP-OCM-L040GM	4096 × 1	7.02μm × 7.02μm	Global	28kHz	M42	Mono	GigE
Line Scan Camera	LP-OCM-L040GC	4096 × 2	7μm × 7μm	Global	28kHz	M42	Color	GigE

## Lens

**Series:** FA and line scan lens  
**Focal length:** 16mm, 25mm, 50mm  
**Applications:** photovoltaic, new materials, semiconductor, li-ion battery



### Technical Parameters

Type	Model	Focal Length	Sensor/Pixel Size	Resolution	F-Number	Mount
FA Len	LP-OLN-FA502811CN	50mm	1.1"	20MP	F2.8-F22	C-Mount
FA Len	LP-OLN-FA162823CB	16mm	2/3"	10MP	F2.8-F16	C-Mount
FA Len	LP-OLN-FA162811CB	16mm	1.1"	12MP	F2.8-F16	C-Mount
FA Len	LP-OLN-FA252811CB	25mm	1.1"	12MP	F2.8-F16	C-Mount
FA Len	LP-OLN-FA252823CB	25mm	2/3"	10MP	F2.8-F16	C-Mount
Line Scan Len	LP-OLN-FL254507M42D	25mm	7μm	4K	F4.5-F22	M42
Line Scan Len	LP-OLN-FL500405M42F	50mm	5μm	5.5K	F4	M42










## Light Source

**Type:** Line scan light, laser light source, strip light, ring light, panel light, coaxial light and tunnel light

**Colors:** white, red, green, blue, IR

**Applications:** photovoltaic, new materials, semiconductor, 3C

### Technical Parameters

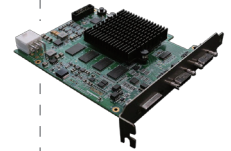
Type	Model	Dimensions	Light-emitting Size / Hole Diameter	Maximum Power	Color	Legend
Bar Light	LP-OLS-TG100/400/500W	100/400/500*35*25	88/388/488*30	3.5W/15W/18.5W	White	
Ring Light	LP-OLS-HG100W/R/G/B	Φ100	Φ40	8.3W	White/Red/Green/Blue	
Direct Backlight	LP-OLS-MG284W/R/G/B	284*284*19	270*270*80*80	44W	White/Red/Green/Blue	
Direct Backlight	LP-OLS-MG286W/R/G/B	286*286*23	270*270*90*90	55W	White/Red/Green/Blue	
Coaxial Light	LP-OLS-TZ100W/R/G/B	150*110*110	100*100	35W	White/Red/Green/Blue	
Tunnel Linear Light	LP-OLS-SD295190W/R/G/B	295*190*53	285*50	288W	White/Red/Green/Blue	
Line Scan Light	LP-OLS-SC300IR-JC8-Y	316mm	300mm	150W	808IR	
Line Scan Light	YJ-OLS-SC300IR4B	316mm	300mm	30W	1050IR	
Fiber Laser Light	LP-OLS-SCL25W/50W	244*129*103(Controller)	145*66(Lens)	25W/50W	808IR	

## Image acquisition board

Based on the industrial-grade PCI Express™ Gen 2.0 standard.

Compact, single-slot structure with bandwidth up to Camera Link 80-bit mode, which can support longer transmission distances while maximizing compatibility with a variety of area and line scan cameras.

**Applications:** photovoltaic, new materials, semiconductor, 3C, and li-ion battery



### Technical Parameters

Model	Interface	Pixel Bit Width	Pixel Clock	Communication	Board Type	Power Dissipation	OS Support	Secondary Development
LP-DAQ-TL-A4-A	CameraLink 2.0	8bit, 10bit, 12bit Mono/Bayer/RGB	20MHz~85MHz	Supports serial communication (1200 to 9216000bps) baud rate	PCIe Gen 2.0 x4	<8W(PoCL free)	Windows 7 32/64 bit Windows 10 32/64 bit	C/C++/C#

## Industrial Computer Series

**Type:** flat and rack-mounted industrial computer

**Applications:** server, AI deep learning vision control, network security, firewall, industrial automation, network intelligent terminal and other industries



### Technical parameters

Model	CPU	MotherBoard	Memory	Hard Disk	LAN Number	USB Number	COM Number	Power	Chassis
LP-EPC-511A	i5-1135G7	N/A	16GB	256G SSD	4	4	2	DC12V	AIO
LP-IPC-767A	i7-6700	Intel Q170	16GB	128G SSD and 2T HHD	4	6	4	AC220	4U
LP-IPC-767B	i7-6700	Intel H110	16GB	1T HHD	2	6	2	AC220	1U

