

Thermal imaging camera (LS-MV-GLF120 / LS-MV-GLF480)

LS-MV-GLF series · Infrared cameras · 2 models

LS-MV-GLF120/480 is an industrial far-infrared thermal imager that measures the surface temperature of objects and displays real-time thermal images, with several temperature measurement ranges, multiple colour modes, user-settable emissivity, frame-by-frame data capture, video recording and a complete secondary development SDK with demo routines (C/C++/VB/Delphi/Python and others). Data is available in 3 formats: temperature of each point, grey value of each point, pseudo-colour of each point.

Features

- High sensitivity, high resolution infrared detector for clear infrared images and temperature measurement accuracy
- RJ45 Gigabit Ethernet interface, 100 metres stable long-distance transmission
- Supports POE power supply, plug-and-play driver design
- 400X300 resolution, up to 50HZ frame rate
- Thermal sensitivity $\leq 55\text{mK}$, thermal response time $<15\text{ms}$
- Multiple cameras can work at the same time in any network grouping, long-time operation without frame loss
- Hardware image processing acceleration reduces host CPU load
- GigE Vision 1.2 standard protocol; supports Halcon, VisionPro and other software
- Functions: emissivity setting, centre temperature display, high/low temperature point display, region-of-interest temperature display, horizontal/vertical mirror, distance correction, temperature correction, user-defined temperature compensation, high/low temperature alarms, colour temperature comparison, image sharpening level, blackbody calibration
- Uncooled vanadium oxide detector, $17\text{ }\mu\text{m}$ pixel



Common specifications

Interface	RJ45 Gigabit Ethernet (GigE Vision 1.2), POE
Sensor type	Thermal imaging
Detector type	Uncooled vanadium oxide
Pixel size	$17\text{ }\mu\text{m}$
Width AD	14bit
Output pixel width	14bit
Video output format	RGB 24bit/Mono 16bit
Exposure time range (ms)	1~6
Exposure method	automatic
Maximum gain (magnification)	0~7
Frame buffer	128MB
Spectral response	$8\text{ }\mu\text{m} - 14\text{ }\mu\text{m}$
Focus mode	Manual focusing
Lens focal length	Optional
Power supply	12V (8PIN aviation connector)
Lens interface	M34x0.75 (customizable)
Image mirroring	Horizontal/Vertical
Spatial resolution	0.99mrad 0.67mrad

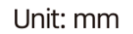
Response rate non-uniformity	≤5%
Power	3W
Dimensions	66mm x 50mm x 50mm (without lens)
Storage temperature and humidity	30°C~60°C, 20%~95% (no condensation)
Working temperature and humidity	0°C~50°C, 20%~80% (no condensation)
User-defined data area	2KB
Data interface	RJ45 Gigabit Ethernet interface, backward compatible with 100M network standard
Vision standard protocol	GigE Vision V1.2 GenICam
Temperature range	Gear 1: -20°C~150°C; Gear 2: 50°C~400°C; temperature measurement accuracy ±1°C or ±2% (take the maximum value)
Temperature measurement mode	1. Ambient temperature and human body temperature measurement (20°C~50°C); 2. Medium temperature mode (-40°C~170°C); 3. High temperature mode (-40°C~800°C)
Color mode	Rainbow colour coding (default), hot metal, white hot, black hot
Operating system	WINXP, WIN7/8/10 32&64 bit system, Linux and ARM Linux driver, Android platform driver, MAC OS system
Driver	Directshow component, Halcon special component, Labview special driver, OCX component, TWAIN component
Programming language pack	C/C++/C#/VB6/VB.NET/Delphi/BCB/Python/Java
Other functions	Support any size ROI custom resolution, contrast and gamma adjustment, saturation adjustment, white balance correction, black level correction, custom dead point coordinate correction, ISP image processing acceleration, 3D noise reduction, custom LUT table, frame rate adjustment, custom camera name, etc.

Models

Model	Optical size	Sensor model	Signal to noise ratio	Dynamic range	Effective pixels	Thermal sensitivity	Default resolution and frame rate
LS-MV-GLF120	6.8mm x 5.1mm	GST417M	75dBFS	80dBc	12W (120,000)	NETD≤55mK @f/1, 300K	400x300 50Hz
LS-MV-GLF480	1.0625"	GST817MC	/	1V~3V	48W (480,000)	NETD≤55mK	800x600 50Hz

More values per model (Field of view, Minimum imaging distance, Typical power consumption, Weight, Mono / colour, Voltage) are on each product page.

Dimensions





Wavelength (μm)	max Transmission	min Transmission
7.2	1.00	0.00
8.0	0.75	0.75
10.0	0.75	0.75
12.5	0.75	0.75
14.0	0.50	0.50
16.0	0.25	0.10

