MAG32 Technical Specification

Features and Advantages

- ✧ TEC-less and heater-less, low power, quick startup, high precision temperature measurement.
- ✧ Ethernet connection, output 50Hz temperature data, can be accessed in the LAN, convenient and flexible.
- ✧ Compatible with most NVR's in market, can play video, control PTZ and focus through NVR.
- ✧ Temperature, video and mixed streams are provided for different applications and network conditions.
- ✧ Record and replay temperature stream, perfectly reproduce historical scenes, super-resolution image supported.
- ✧ Supports multicast and broadcast, collect digital images with temperature data at multiple points at the same time.
- ✧ Provide real time application software ThermoX and offline analysis software ThermoScope.
- ✧ More than 60 functions in SDK for camera control, image processing and temperature measurement. Fully documented, with examples, easy to use.
- ✧ Friendly interfaces, easy for integration.

MAG32 Specification

Detector	
Detector type	Uncooled microbolometer
Wavelength range	7.5~14μm
Pixels	384×288
Pixel size	17μm
Frame rate	50Hz
Temperature Measurement and Images	
Temperature measurement range	
Accuracy	Refer to " Temperature Measurement Range Options "
Sensitivity (NETD)	
Viewing angle	
Angular resolution	Refer to " Optics Options "
Focus	Manual/Auto(electric lens only), real time display of sharpness to assist focus
Imaging distance	0.3m~∞
Emissivity correction	Temperature correction based on manually input emissivity and background temperature, emissivity 0.01~1
Window transmission correction	Temperature correction based on input transmission

Atmospheric transmission correction	Temperature correction based on atmospheric parameters
Point measurement	Real time temperature in mouse pointer
Measurement objects	Global max/min temperature tracking, global average temperature. Point, line, rectangle, circle, ellipse, and polygon, up to 100 temperature measurement objects. All objects can independently set alarm threshold, sampling period and draw historical temperature curve.
High/low temperature alarm	Audible and visual alarm, log recording. Temperature data and image automatically saved when alarm is triggered. High voltage output during alarm.
Temperature analysis	Relative temperature, histogram, historical temperature curve, line analysis
Image freeze	Support
Image enhancement	Automatic and manual grayscale, DDE, contrast and brightness
Palettes	10 palettes, white hot, black hot, iron bow, rainbow, etc.
Electronic zoom	2X, 4X, full screen display
Data Storage	
Report	Word format, with guidance for content input
Measurement objects	Measurement objects can be stored in file and read from file. Representative temperatures in each object, eg. maximum temperature, can be saved to file.
Temperature data	Temperature data file can be processed using offline analysis software. CSV format can be opened using EXCEL.
Temperature stream	Temperature stream can be replayed. Maximum file size can be specified.
Temperature stream replay	Playback with time stamp. Adjustable playback speed, freeze, cycle playing. During playback, image processing can be carried out and super-resolution image can be generated.
Image	BMP or JPG format. With or without objects.
Video	MPEG compressed. With or without objects. Maximum file size can be specified.
Log file	Automatic record and save.
Network Connection	
Data interface	Ethernet, support RTP, RTCP, RTSP, ONVIF, FTP, TCP, UDP, IP, DHCP, ARP, and ICMP.
IP Assignment	Automatic or static IP, DHCP Server available.
Networking	Direct connection to PC. Connect in LAN. Multicast or broadcast in LAN.
Heartbeat detection	Support
Environmental Parameters	
Working temperature	-30~60℃, refer to " Temperature Measurement Range Options "
Storage	-40~80℃
Humidity	≤85% (non condensing)
Encapsulation	IP54
Shock	25G, IEC68-2-29
Vibration	2G, IEC68-2-6
EMC	CE/FCC
Electrical Interface	
Temperature date	Ethernet, RJ45

Analog video	NTSC/PAL, BNC, with or without objects.
Serial	RS485, RS232 optional, can be used to control PTZ..
I/O	Input to trigger FFC, snapshot, detect. Output high voltage during alarm.
Lens motor drive	Support
Power supply	DC 12V/1.25A, adapter input AC 100 ~240V. Aviation plug with self-locking.
Power consumption	2.2 W
Physical	
Dimension	65mm(L)x62mm(W)x60mm(H)
Weight	0.28kg (lens not included)
Installation	UNC 1/4-20 for standard tripod, M3 threaded (metric)

Temperature Measurement Range Options

Models	Temperature range	Frame rate	NETD	Accuracy	Ambient temperature
MAG32AT	20~45℃	25 Hz	<40 mK	0.5℃	10~40℃
MAG32	-20~150℃	50 Hz	<60 mK	2℃ or 2%	-10~50℃
MAG32	-20~300℃	50 Hz	<100 mK	2℃ or 2%	-10~50℃
MAG32HT	20~500℃	50Hz	<150mK	2℃ or 2%	0~50℃
MAG32HT	150~1000℃	50 Hz	\	2%	0~50℃
MAG32HT	250~1600℃	50 Hz	\	2%	0~50℃
More temperature ranges available, please call to ask.					

Optics Options

Focal length	Viewing angle	Angular resolution
4.5mm	88°×65°	4.1 mrad
6.5mm	56.6°×42.8°	2.6 mrad
10mm	37.4°×28°	1.7 mrad
15mm	26°×20°	1.13 mrad
25mm	15°×11.3°	0.68 mrad
40mm	9.4°×7.1°	0.43 mrad
60mm	6.3°×4.7°	0.28 mrad
100mm	3.7°×2.8°	0.17mrad
Electric/manual lens provided. More options available.		

Dimensions