



Technical Specifications

MOBOTIX S74

Flexible. Modular. Unique.

Weatherproof and robust, the latest generation of our successful S camera models features increased modularity as well as the latest MOBOTIX 7 system platform with intelligent Plug-In App concept. The result is a system completely unrivaled in terms of performance, functionality and design.

- Platform with the most flexible codec support: H.264, H.265, MxPEG+ and MJPEG
- ONVIF Profile G, S, T conformity guarantees utmost interoperability
- Increased modularity with flexible usage of a combination of up to three sensor or functional modules
- 2 x 4K UHD resolution
- Wide Dynamic Range (WDR) with up to 120 dB
- Easy Plug quick-mounting system
- Robust in any environment: -40 to 65 °C/-40 to 149 °F, IP66, NEMA 4X and IK10

EN 54-10 certified MOBOTIX thermal technology



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When it comes to building security, the EN 54-10 certified MOBOTIX Thermal TR cameras are the first choice. As standalone detectors or integrated into fire alarm systems, the certified systems meet the building safety regulations in accordance with the EU Construction Products Regulation.

- Complies with the EU Construction Products Regulation
- Early fire detection, even before flames arise
- Universally applicable, even outdoors
- Connection to control center/fire alarm systems
- Use of additional optical sensor possible
- Highly flexible: up to 20 measuring windows simultaneously

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Order Information

Name	MOBOTIX S74
Order Code:	Mx-S74A

Hardware

Feature	Properties
Image sensor (color or B&W sensor)	up to 4K UHD 3840x2160, 16:9, 1/1,8"
Light sensitivity	<ul style="list-style-type: none"> ▪ Color sensor (day): 0,1 lx @ 1/60s; 0,005 lx @ 1s ▪ BW sensor (night): 0,02 lx @ 1/60s; 0,001 lx @ 1s
Exposure control	Manual and automatic mode 1 s to 1/16,000 s
IK protection class	IK10 (housing)
IP / NEMA protection class	IP66 / NEMA 4X
Operating temperature range	-40 to 65 °C/-40 to 149 °F
Min. cold start temperature	-30 °C/-22 °F
Relative Humidity	95 % non-condensing
Internal DVR, out of the box	MicroSD card (8 GB), MxPEG+ recording only
I/Os	S74 IO Slide in Board required
Microphone/Speaker	S74 IO Slide in Board required
Passive infra-red sensor (PIR)	Available with functional module, max. 4.5 Watt (see Functional Modules, p. 15)
Infra-red illumination	Three functional modules for wide-angle, standard, and tele lenses
Range of infra-red illumination	Up to 30 m/100 ft (may be more depending on scene)
Max. power consumption	max. 25 W
Electrical surge protection	S74 Network Slide in Board with LSA terminal, p. 16 required
PoE standard	PoE Plus (802.3at-2009)/Class 4 (Network slide in Board required. See S74 Network Slide in Board with LSA terminal, p. 16 or S74 Network Slide in Board with RJ45 socket, p. 16)

Feature	Properties
Interfaces	4 sensor / functional modules USB-C 2 Slots for slide in boards (Network, IOs etc.)
Mounting Options	Wall-mountable
Dimensions (height x width x depth)	36 x 232 x 110 mm
Weight without sensor modules	1.130g
Housing	Aluminum, PBT-30GF
Standard accessories	1 SD card 8 GB (installed) 1 Important Safety Information 1 Sticker with EAN number of camera 1 Sticker with IP address of camera 1 Module wrench (gray) 1 Lens wrench blue 4 Wood screws 4.5 x 60 mm 4 Dowels S8 2 Covers for screw plastic white
Detailed technical documentation	www.mobotix.com > Support > Download Center > Marketing & Documentation
MTBF	80,000 hours
Certificates	EN 50121-4, EN 55032, EN 55035, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 62368-1, EN 63000, AS/NZS CISPR32, 47 CFR Part 15b
Protocols	DHCP (client and server), DNS, ICMP, IGMP v3, IPv4, IPv6, HTTP, HTTPS, FTP, FTPS, NFS, NTP (client and server), RTP, RTCP, RTSP, SFTP, SIP (client and server), SMB/CIFS, SNMP, SMTP, SSL/TLS 1.3, TCP, UDP, VLAN, VPN, Zero-conf/mDNS
Manufacturer warranty	5 years

Average Power Consumption

S74 - Body

Average power consumption: 8.1 W

S74 - Audio Connected, no Video

Modules:

Audio

Average power consumption: 8.1 W

S74 - S/N, 12MP, IR, WL, Audio

Modules:

Audio: PCB + Module

M1: 4K Day/Night DN050

M2: IR 850nm wide

M3: 12MP Day/Night DN016

M4: White Light 5700K wide

Average power consumption: 19.5 W

S74 - S/N, Thermal, IR, WL, Audio

Modules:

Audio: PCB + Module

M1: 4K Day/Night DN050

M2: IR 850nm wide

M3: Thermographic Sensor 640R080

M4: White Light 5700K wide

Average power consumption: 20.9 W

S74 - Thermal, Multisense, WL, Audio

Modules:

Audio: PCB + Module

M1: 4K Day/Night DN050

M2: Multisense

M3: Thermografic Sensor 640R080

M4: White Light 5700K wide

Average power consumption: 16.5 W

Image Formats, Frame Rates, Image Storage

Feature	Properties
Available video codecs	<ul style="list-style-type: none"> ■ H.264, H.265 ■ MxPEG+ ■ MJPEG
Image resolutions	VGA 640x360, XGA 1024x576, HD 1280x720, FullHD 1920x1080, QHD 2560x1440, 4K UHD 3840x2160
Multi streaming	H.264, H.265 with triple streaming
Multicast stream via RTSP	Yes
Max. image H.264 resolution	<ul style="list-style-type: none"> ■ One sensor: 4K UHD, 3840x2160 (8MP) ■ Both sensors (dual image): 2x 4K UHD, 7680x2160 (16MP)
Max. frame rate	MxPEG: 20@4K, H.264: 30@4K, H.265: 30@4K

General Features

Feature	Properties
WDR	Up to 120 dB
Software features	<ul style="list-style-type: none">▪ H.264, H.265 Multistreaming▪ Multicast stream via RTSP▪ Digital pan, tilt, zoom/vPTZ (up to 8x zoom)▪ Genetec protocol integration▪ Custom exposure zones▪ Snapshot recording (pre/post-alarm images)▪ Continuous recording▪ Event recording▪ Time-controlled flexible event logic▪ Weekly schedules for recordings and actions▪ Event video and image transfer via FTP and email▪ Playback and QuadView via web browser▪ Animated logos on the image▪ Master/Slave functionality▪ Privacy zone scheduling▪ Remote alarm notification (network message)▪ Programming interface (HTTP-API)▪ MOBOTIX MessageSystem
ONVIF compatibility	Profile G, S, T
Master/Slave functionality	Yes
Remote alarm notification	email, network message (HTTP/HTTPS), SNMP, MxMessageSystem

Feature	Properties
DVR / image storage management	<ul style="list-style-type: none"> ■ MxPEG+ only ■ Internal microSD card (SDHC/SDXC), 8 GB out of the box ■ On external USB and NAS devices, ■ Different streams for live image and recording ■ MxFFS with buffered archive, pre- and post-alarm images, storage monitoring with error reporting
Camera and data security	User and group management , SSL connections, IP-based access control, IEEE 802.1X, intrusion detection, digital image signature

Video Analysis

Feature	Properties
Video motion detection	Yes
MxActivitySensor	Version 1.0, 2.1 and object-based MxAnalytics AI
ONVIF compatibility	Profile S, T
MxAnalytics	Heatmap, people counting & object-based counting
MOBOTIX App support	Yes

Video Management Software

Feature	Properties
MOBOTIX HUB	Yes www.mobotix.com > Support > Download Center > Software Downloads
MxManagementCenter	Yes (MxMC 2.2 and higher) www.mobotix.com > Support > Download Center > Software Downloads
MOBOTIX LIVE App	Yes Available in Android and iOS App Stores.

Sensor Modules

Dimensions of Sensor Modules

Dimensions (height x width)	58 x 42,5 (50 mm)
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Weight of Sensor Modules

Sensor Module	Weight
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Standard Sensor Modules	max. 150g
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Functional Modules	max. 150g
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Thermal Sensor Module	380g
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PTMount Thermal	890g
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Supported Image Sensor Modules

Sensor Module	Order Code
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Sensor module with standard 45° lens	Mx-O-M7SA-8DN100
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	Mx-O-M7SA-8D100
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	Mx-O-M7SA-8N100
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	Mx-O-M7SA-4DN100
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Sensor module with tele lens 30°	Mx-O-M7SA-8DN150
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	Mx-O-M7SA-8D150
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	Mx-O-M7SA-8N150
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	Mx-O-M7SA-4DN150
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Sensor Module	Order Code
Sensor module with tele lens 15°	Mx-O-M7SA-8DN280
	Mx-O-M7SA-8D280
	Mx-O-M7SA-8N280
	Mx-O-M7SA-4DN280
Sensor module with wide angle lens 60°	Mx-O-M7SA-8DN080
	Mx-O-M7SA-8D080
	Mx-O-M7SA-8N080
	Mx-O-M7SA-4DN080
Sensor module with super wide angle lens 95°	Mx-O-M7SA-8DN050
	Mx-O-M7SA-8D050
	Mx-O-M7SA-8N050
	Mx-O-M7SA-4DN050
Sensor module with ultra wide angle lens 120° 4K	Mx-O-M7SA-8DN040
	Mx-O-M7SA-8D040
	Mx-O-M7SA-8N040
	Mx-O-M7SA-4DN040

For a complete list of lenses for MOBOTIX cameras, please see the Lens Table document for MOBOTIX 7 models on www.mobotix.com > Support > Download Center > Marketing & Documentation > Lens Table.

Supported Thermal Sensor Modules

Sensor module	Order code
CIF Thermal 45° x 35°	MX-O-M7SB-336TS100
CIF Thermal 25° x 19°	Mx-O-M7SB-336TS150
CIF Thermal 17° x 13°	Mx-O-M7SB-336TS280
CIF Thermal Radiometry 45° x 35°	Mx-O-M7SB-336RS100
CIF Thermal Radiometry 25° x 19°,	Mx-O-M7SB-336RS150

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Sensor module	Order code
CIF Thermal Radiometry 17° x 13°	Mx-O-M7SB-336RS280
CIF Thermal Radiometry 9,3° x 7,1°	Mx-O-M7SB-336RS500 (BTO)
ECO CIF Thermal 105°x75°	Mx-O-M7SA-320T040
ECO CIF Thermal 56°x42°	Mx-O-M7SA-320T080
VGA Thermal 90° x 69°	Mx-O-M7SB-640TS050
VGA Thermal 69° x 56°	Mx-O-M7SB-640TS080
VGA Thermal 45° x 37°	Mx-O-M7SB-640TS100
VGA Thermal 32° x 26°	Mx-O-M7SB-640TS150
VGA Thermal Radiometry 90° x 69°	Mx-O-M7SB-640RS050
VGA Thermal Radiometry 69° x 56°	Mx-O-M7SB-640RS080
VGA Thermal Radiometry 45° x 37°	Mx-O-M7SB-640RS100
VGA Thermal Radiometry 32° x 26°	Mx-O-M7SB-640RS150
VGA Thermal Radiometry 18° x 14°	Mx-O-M7SB-640RS280 (BTO)

The **Thermal Radiometry (TR)** variants automatically alarm when the temperature exceeds or falls below defined limits. This is crucial for the detection of fire or heat sources. Up to 20 different temperature events can be configured simultaneously in so-called TR windows or over the complete sensor image over a temperature range of -40 to 550 °C/-40 to 1022 °F .

The **Thermal (non-TR)** variants only measure in the center of the image (Thermal spot, 2x2 pixel).

Features Thermal Image Sensors

Feature	Properties	
Thermal sensitivity	Typ. 50 mK, IR range 7.5 to 13.5 μm	
Temperature measurement range	-40 to 550 $^{\circ}\text{C}$ / -40 to 1022 $^{\circ}\text{F}$	
Thermal image sensor	Uncooled microbolometer, CIF: 336 x 256 pixels / VGA: 640 x 480	
Dimensions	PT mount Thermal 336/640: 98.5mm x 106mm diam, 620g (including PT Mount) Sensor module alone: 73mm (+4.4mm front glass) x 57mm diam (63mm front glass), 310g	
Max. image size	Can be scaled up to 3072 x 2048 (6MP), automatically scaled to size of MX sensor module	
Max. frame rate	9fps (-FAST version 25/30fps on request)	
Pixel pitch	17 μm	
Field of view	Sensor Module	FoV
	336 xx 100	45° x 35°; 2.27mr, focal 7.5mm, f/1.25
	336 xx 150	25° x 19°; 1.31mr, focal 13mm, f/1.25
	336 xx 280	17° x 13°; 0.90mr, focal 19mm, f/1.25
	336 xx 500	9° x 7°; 0.486mr, focal length 35mm, f/1.5
	640 xx 050	90° x 69°; 2.27mr, focal 7.5mm, f/1.4
	640 xx 080	69° x 56°; 1.89mr, focal 9mm, f/1.4
	640 xx 100	45° x 37°; 1.31mr, focal 13mm, f/1.25
	640 xx 150	32° x 26°; 0.90mr, focal 19mm, f/1.25
	640 xx 280	18°x14°; 0.486mr, focal length 35mm, f/1.5
Operating temperature	-40° to +65 $^{\circ}\text{C}$ / 40° to 149 $^{\circ}\text{F}$; 5% to 95% non-condensing	
Power consumption	CIF: 1W VGA: 1.2W	
MTBF	80,000 hours	
IP rating	IP67	

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Feature	Properties
IK rating	IK04
Material	PBT-30GF (housing); Germanium (lens)
Software (included)	Video management software MxManagementCenter

Features ECO Thermal Image Sensor

Feature	Properties
Thermal sensitivity	Typ. 65 mK, IR range 7.8 to 14 μ m
Temperature measurement range	-40 to 330°C / -40 to 626 °F
Field of view	T040: 105 x 75°; 5,23mr, focal 2.2mm, f/1.05 T080: 56 x 42°; 3,00mr, focal 4.0mm, f/1.00
Thermal image sensor	Uncooled microbolometer, CIF: 320 x 240 pixels
Dimensions	58 x 42.5 mm (dia. 50 mm), 65g
Pixel pitch	12 μ m
Max. image size	Can be scaled up to 3072 x 2048 (6MP), automatically scaled to size of MX Sensor module
Max. frame rate	9 fps (when displaying an Mx Sensor module and a thermal sensor module, the overall frame rate of the camera is reduced to 9 fps)
Operating temperature	-40° to +65°C / 40° to 149°F; 5% to 95% non-condensing
Power consumption	600mW
IP rating	IP66
IK rating	IK04
Material	PBT-30GF (housing); Chalcogenide (lens)
Software (included)	Video management software MxManagementCenter

Functional Modules

Functional Module	Order Code	Remark
Audio module		via IO Interface Board
Audio module	Mx-F-AUDA	Audio module with microphone and speaker
Functional MultiSense module	Mx-F-MSA	with PIR sensor, temperature sensor, illumination sensor
Functional IR Light modules	Mx-F-IRA-W	for Super Wide-Angle Lens Sensor Modules 95°
	Mx-F-IRA-S	for Standard & Wide-Angle Lens Sensor Modules 45° and 60°
	Mx-F-IRA-T	for Tele Lens Sensor Modules 15° and 30°
		Power consumption IR Light Modules: 4,2 W at 100% brightness.
White Light Modules	Mx-F-WLA-W	for Super Wide-Angle Lens Sensor Modules 95°
	Mx-F-WLA-S	for Standard & Wide-Angle Lens Sensor Modules 45° and 60°
	Mx-F-WLA-T	for Tele Lens Sensor Modules 15° and 30°
		Power consumption White Light Modules: 3,2 W at 100% brightness.

Interface Slide in Boards

S74 Network Slide in Board with RJ45 socket

Order Code	Mx-F-S7A-RJ45
Power Supply	PoE Plus (802.3at-2009)/Class 4
Network	RJ45 / Ethernet 1000Base-T

S74 Network Slide in Board with LSA terminal

Order Code	Mx-F-S7A-LSA
Power Supply	PoE Plus (802.3at-2009)/Class 4
Network	LSA / Ethernet 1000Base-T

S74 Network Slide in Board with RJ45 and VDC power supply

Order Code	Mx-F-S7A-RJ45-VDC
Power Supply	12-24 V DC only - recommended 2,5-1,5A
Network	RJ45 / Ethernet 1000Base-T

Dimensions

NOTE! Download the drilling template from the section or on the MOBOTIX website: www.mobotix.com > [Support > Download Center > Marketing & Documentation > Drilling Templates.](#)

CAUTION! Always print or copy the drilling template at 100% of the original size!

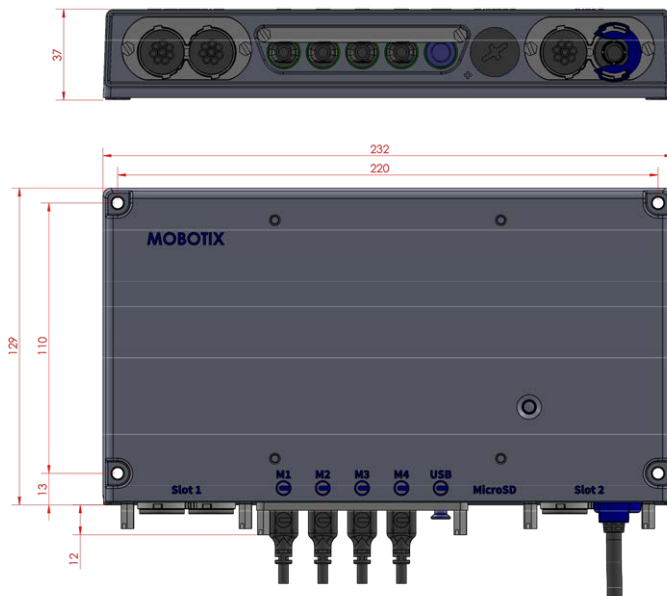


Fig. 1: MOBOTIX S74: All measurements in mm

MOBOTIX

BeyondHumanVision

[EN_05/23](#)

MOBOTIX AG • Kaiserstrasse • D-67722 Langmeil • Tel.: +49 6302 9816-103 • sales@mobotix.com • www.mobotix.com

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