

# Overview All Camera Models



The HiRes Video Company



Lens Options	The Q24 camera models can be ordered with L11 or L22 lens.						D24: The lenses in D24 camera models can be replaced on site. D24 IT: L22 lens is set at the factory and inspected.						D14 Models: All lenses (except L11) in D14 camera models can be replaced on site.					
Hemispheric 360° 11 mm	L11	L11	L11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Super Wide Angle 22 mm	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22	L22
Wide Angle 32 mm	-	-	-	L32	L32	L32	L32	L32	L32	L32	L32	L32	L32	L32	L32	-	-	-
Wide Angle 43 mm	-	-	-	L43	L43	L43	L43	L43	L43	L43	L43	L43	L43	L43	L43	-	-	-
Tele 65 mm	-	-	-	L65	L65	L65	L65	L65	L65	L65	L65	L65	L65	L65	L65	-	-	-
Tele 135 mm	-	-	-	L135	L135	L135	L135	L135	L135	L135	L135	L135	L135	L135	L135	-	-	-
CSVario 24 - 54 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Hardware Features	Q24 Models						D24 Models						D14 Models					
Outdoor weatherproof	IP54	IP65	IP65	IP54	IP65	IP65	IP54	IP65	IP65	IP54	IP65	IP65	IP54/IP65*	IP54/IP65*	IP54/IP65*	IP54/IP65*	IP54/IP65*	IP54/IP65*
RAM (MB)	64	128	128	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
Video Ring Buffer (MB)	2	64	64	2	32	32	2	32	32	2	32	32	2	32	32	2	32	32
MicroSD storage (up to 32 GB)	-	4 GB incl.	4 GB incl.	-	4 GB incl.	4 GB incl.	-	4 GB incl.	4 GB incl.	-	4 GB incl.	4 GB incl.	-	4 GB incl.	4 GB incl.	-	4 GB incl.	4 GB incl.
Microphone/speaker	-	X	X	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO
Image Sensor	Color	Color	B/W	Color	Color	B/W	Color	Color	B/W	Color/Color	B/W / B/W	Color/Color	Color/Color	B/W / B/W	Color/Color	B/W / B/W	Color/Color	B/W / B/W
Color Sensor sensitivity at t=1/60 / 1 sec (Lux)	1 / 0,05	1 / 0,05	-	1 / 0,05	1 / 0,05	-	1 / 0,05	1 / 0,05	-	1 / 0,05	-	1 / 0,05	-	1 / 0,05	-	1 / 0,05	-	1 / 0,05
B/W Sensor sensitivity at t=1/60 / 1 sec (Lux)	-	-	0,1 / 0,005	-	-	0,1 / 0,005	-	-	0,1 / 0,005	-	-	0,1 / 0,005	-	0,1 / 0,005	-	0,1 / 0,005	-	0,1 / 0,005

Resolution, Framerate and Image Storage	Q24 Models						D24 Models						D14 Models					
Max. Resolution (per sensor)	VGA	3MEGA	MEGA	VGA	VGA	VGA	VGA	VGA	VGA	VGA	VGA	VGA	3MEGA	MEGA	VGA	VGA	3MEGA	MEGA
Max. Resolution Pixel (per sensor)	640x480	2048x1536	1280x960	640x480	640x480	640x480	640x480	640x480	640x480	640x480	640x480	640x480	2048x1536	1280x960	640x480	640x480	2048x1536	1280x960
Max. frame rate MxPEG / Max. Resolution	16 fps	20 fps	30 fps	16 fps	30 fps	30 fps	16 fps	30 fps	30 fps	16 fps	30 fps	30 fps	20 fps	30 fps	30 fps	20 fps	30 fps	30 fps
CIF-Images / 4 GB MicroSD DVR intern	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
VGA-Images / 4 GB MicroSD DVR intern	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000
MEGA-Images / 4 GB MicroSD DVR intern	-	40.000	40.000	-	-	-	-	-	-	-	-	-	40.000	40.000	-	-	40.000	40.000
3MEGA-Images / 4 GB MicroSD DVR intern	-	20.000	-	-	-	-	-	-	-	-	-	-	20.000	-	-	-	20.000	-

Software Features	Q24 Models						D24 Models						D14 Models					
Digital zoom (8x), panning/tilting	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
Motion-JPEG/MxPEG	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X
Programmable illumination value, temperature	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Video Motion Detection	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Time and Event Control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Time tables with holidays	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
Web features (FTP/e-mail with image)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Quad/Multiview in browser	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Recording/Playback in browser	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
Logo generator, animations	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
Single image recording (pre-/post-alarm)	3	50	50	3	10	10	3	50	50	3	10	10	3	50	50	3	10	10
TB ring buffer (Win/Lin/Mac) via NAS	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
Video/Audio recording (continuous)	-	X	X	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO
Video/Audio recording (event-driven)	-	X	X	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO
Event-controlled frame rate incl. audio	-	X	X	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO	-	via ExtIO	via ExtIO
Flexible event logic	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master/slave arming	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Privacy Zones, several areas	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bidirectional audio (IP)	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customized voice messages	-	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Remote alert pop-ups (alarms via TCP/IP)	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
Alert notification on softphones (SIP)	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
ISDN telephony/ISDN modem (PPP)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VoIP (SIP)/ISDN alarm call with Pin	-	SIP	SIP	-	SIP via ExtIO	SIP via ExtIO	-	SIP via ExtIO	SIP via ExtIO	-	SIP via ExtIO	SIP via ExtIO	-	SIP via ExtIO	SIP via ExtIO	-	SIP via ExtIO	SIP via ExtIO
Programming Interface/http-API	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X	-	X	X
RS232 Data Logger/Terminal	-	via USB	via USB	-	via USB	via USB	-	via USB	via USB	-	via USB	via USB	-	via USB	via USB	-	via USB	via USB
Security-Features (https/SSL ...)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

\* IP65 only with the Outdoor Wall Mount

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Lens Options	M24 Models: All lenses (except L11) in M24 models can be replaced on site. M24 IT: L22 lens is set at the factory and inspected.				M12 Models: Lenses are set and locked into position at the factory and inspected.		Subsequent replacement of the lens (L43/L135) by MOBOTIX costs 200 € (300 € for both lenses). Changing lens from L22 to other is not possible afterward.					
Hemispheric 360° 11 mm	-	-	L11	L11	-	-	-	-	-	-	L11	L11
Super Wide Angle 22 mm	L22	L22	L22	L22	-	-	-	L22	L22	L22	-	-
Wide Angle 32 mm	L32	L32	L32	L32	-	-	-	-	-	-	-	-
Wide Angle 43 mm	L43	L43	L43	L43	L43	L43	L43	L43	L43	L43	-	-
Tele 65 mm	L65	L65	L65	L65	-	-	-	-	-	-	-	-
Tele 135 mm	L135	L135	L135	L135	-	-	L135	L135	L135	L135	-	-
CSVario 24 - 54 mm	-	-	CSVario	CSVario	-	-	-	-	-	-	-	-

Hardware Features	M24 Models				M12 Models		M12D Models				T24M Models	
Outdoor weatherproof	IP66	IP66	IP66	IP66	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
RAM (MB)	64	64	128	128	64	64	64	128	128	128	128	128
Video Ring Buffer (MB)	32	32	64	64	12	32	32	64	64	64	64	64
MicroSD storage (up to 32 GB)	4 GB incl.	4 GB incl.	4 GB incl.	4 GB incl.	-	X	X	X	X	4 GB incl.	4 GB incl.	4 GB incl.
Microphone/speaker	X	X	X	X	-/X	X/X	X/X	X/X	X/X	X	X	X
Image Sensor	Color	B/W	Color	B/W	Color	Color/Color	Color/B/W	Color/Color	Color/B/W	B/W/B/W	Color	S/W
Color Sensor sensitivity at t=1/60 / 1 sec (Lux)	1 / 0,05	-	1 / 0,05	-	1 / 0,05	1 / 0,05	1 / 0,05	1 / 0,05	1 / 0,05	-	1 / 0,05	-
B/W Sensor sensitivity at t=1/60 / 1 sec (Lux)	-	0,1 / 0,005	-	0,1 / 0,005	-	-	0,1 / 0,005	-	0,1 / 0,005	0,1 / 0,005	-	0,1 / 0,005

Resolution, Frame rate and Image Storage	M24 Models				M12 Models		M12D Models				T24M Models	
Max. Resolution (per sensor)	VGA	VGA	3MEGA	MEGA	3MEGA	VGA	VGA	3MEGA	3MEGA	MEGA	3MEGA	MEGA
Max. Resolution Pixel (per sensor)	640x480	640x480	2048x1536	1280x960	2048x1536	640x480	640x480	2048x1536	2048x1536	1280x960	2048x1536	1280x960
Max. frame rate MxPEG / Max. Resolution	16 fps	30 fps	30 fps	20 fps	16 fps	30 fps	30 fps	16 fps	16 fps	20 fps	20 fps	30 fps
CIF-Images / 4 GB MicroSD DVR intern	250.000	250.000	250.000	250.000	-	250.000	250.000	250.000	250.000	250.000	250.000	250.000
VGA-Images / 4 GB MicroSD DVR intern	125.000	125.000	125.000	125.000	-	125.000	125.000	125.000	125.000	125.000	125.000	125.000
MEGA-Images / 4 GB MicroSD DVR intern	-	-	40.000	40.000	-	-	-	40.000	40.000	40.000	40.000	40.000
3MEGA-Images / 4 GB MicroSD DVR intern	-	-	20.000	-	-	-	-	20.000	20.000	20.000	20.000	-

Software Features	M24 Models				M12 Models		M12D Models				T24M Models	
Digital zoom (8x), panning/tilting	X	X	X	X	X	X	X	X	X	X	X	X
Motion-JPEG/MxPEG	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X
Programmable illumination value, temperature	X	X	X	X	X	X	X	X	X	X	X	X
Video Motion Detection	X	X	X	X	X	X	X	X	X	X	X	X
Time and Event Control	X	X	X	X	X	X	X	X	X	X	X	X
Time tables with holidays	X	X	X	X	-	X	X	X	X	X	X	X
Web features (FTP/e-mail with image)	X	X	X	X	X	X	X	X	X	X	X	X
Quad/Multiview in browser	X	X	X	X	X	X	X	X	X	X	X	X
Recording/Playback in browser	X	X	X	X	X	X	X	X	X	X	X	X
Logo generator, animations	X	X	X	X	X	X	X	X	X	X	X	X
Single image recording (pre-/post-alarm)	10	10	50	50	3	10	10	50	50	50	50	50
TB ring buffer (Win/Lin/Mac) via NAS	X	X	X	X	-	X	X	X	X	X	X	X
Video/Audio recording (continuous)	X	X	X	X	-	X	X	X	X	X	X	X
Video/Audio recording (event-driven)	X	X	X	X	-	X	X	X	X	X	X	X
Event-controlled frame rate incl. audio	X	X	X	X	-	X	X	X	X	X	X	X
Flexible event logic	-	-	X	X	-	-	-	X	X	X	X	X
Master/slave arming	-	-	X	X	-	-	-	X	X	X	X	X
Privacy Zones, several areas	-	-	X	X	-	-	-	X	X	X	X	X
Bidirectional audio (IP)	X	X	X	X	-	X	X	X	X	X	X	X
Customized voice messages	X	X	X	X	-	X	X	X	X	X	X	X
Remote alert pop-ups (alarms via TCP/IP)	X	X	X	X	-	X	X	X	X	X	X	X
Alert notification on softphones (SIP)	X	X	X	X	-	X	X	X	X	X	X	X
ISDN telephony/ISDN modem (PPP)	-	-	-	-	X/X	X/X	X/X	X/X	X/X	-	-	-
VoIP telephony (Audio/Video, SIP)	SIP	SIP	SIP	SIP	-	SIP	SIP	SIP	SIP	SIP	SIP	SIP
Programming Interface/http-API	X	X	X	X	X	X	X	X	X	X	X	X
RS232 Data Logger/Terminal	-	-	-	-	-	X	X	X	X	via USB	via USB	via USB
Security-Features (https/SSL ...)	X	X	X	X	X	X	X	X	X	X	X	X

**Explanations IP Protection Classes**

Many applications require electrical and electronic devices such as MOBOTIX cameras to operate reliably for many years under harsh environmental conditions. In order for the devices to continue working properly, components must be kept within the permitted temperature range and protected from moisture and foreign bodies such as dust.

MOBOTIX systems are categorized into different protection classes based on their suitability for various environmental conditions. These protection classes are indicated by IP (International Protection) ratings. The protection class designation is composed of the letters "IP" and a two-digit number. These numbers show the level of protection offered by the housing of the device. The first digit shows the level of protection against contact and foreign bodies and the second digit shows the level of protection against moisture. MOBOTIX products are available in the following protection classes:

**IP54:** Protected against dust accumulation (dust protected) and splashing water from any direction

**IP65:** Protected against dust entering (dust proof) and water jets (nozzle) from any direction

**IP66:** Protected against dust entering (dust proof) and powerful water jets

Cameras with protection classes IP65 and IP66 can generally be used for outdoor applications without any additional protective measures (IP65 is generally used in automotive applications). IP54 is typically used in industrial applications. Devices with IP54 protection class are only suitable for limited outdoor use (without additional protection).