



MEGASSOA™ Series

MEGASSOA™, a MegaSmart IP Solution

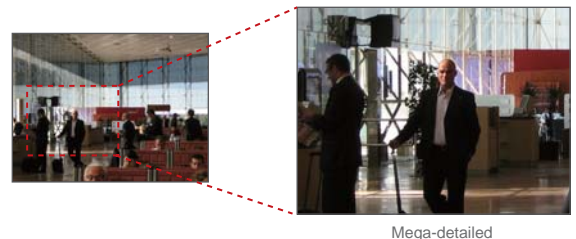
MEGASSOA™ is MESSOA's proprietary technology for enhancing the capabilities of megapixel network cameras to deliver a smarter IP solution. MESSOA's MEGASSOA™ series couples intelligent functions with amazingly clear and detailed images to deliver a superior security solution.

MegaSmart Full HD IP Solution

MESSOA introduces a new series of megapixel network cameras utilizing our most advanced MEGASSOA™ technology. The series incorporates a full range of intelligent functions, including H.264 compression, HyperDynamic, intelligent detection, smart focus, and PoE. The series delivers a truly user-friendly IP solution, and is also ONVIF compliant, facilitating integration and enhancing scalability by ensuring interoperability between network video products regardless of their brand.

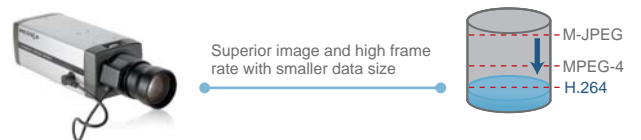
Megapixel Means Mega-detailed

Sharp, detailed images are crucial to surveillance. The higher the resolution, the more detail in the image. Megapixel resolution optimizes every detail to deliver clearer, more detailed images for identification. Megapixel digital cameras are also capable of surveilling a larger area than their analog counterparts without sacrificing image resolution.



H.264 Compression

The MEGASSOA™ series features advanced MPEG4, MJPEG and H.264 video compression, allowing users to select the compression format that best matches their application needs. H.264's highly efficient compression algorithm accelerates megapixel camera operations by reducing file sizes and bandwidth needs while maintaining image quality. It also reduces network bandwidth and storage costs.



Enhanced Lumii™II technology

MESSOA™ series cameras are equipped with a Lumii™II sensor that delivers high sensitivity images without blurring. Lumii™II is a new technology that increases the sensitivity and reduces video noise in low light conditions, ensuring that nighttime images are clear and bright.

Our Lumii™II technology uses a sensor with a complementary color filter to deliver high sensitivity levels and clear, crisp images in even the most difficult lighting conditions. The cameras' complementary color filters also allow more light to reach the sensor than do the more commonly used primary (RGB) color filters, providing you with better surveillance images.

To overcome the challenge of moving objects at night, conventional cameras expand more exposure time to increase the entering light. Unfortunately, the longer exposure time also causes blur, making the image unclear. Whereas Lummi technology makes the camera overcome the blur side effect at night while capturing moving objects.



Lumii OFF



Lumii ON: Clearer and Brighter



Conventional: blur of moving object



MESSOA: Clear moving object for identification.



ICR day/night function

Infrared illumination is crucial in surveillance camera applications. Our MEGASSOA series cameras incorporate a mechanical ICR filter function to guarantee perfect pictures no matter the light level. The ICR filter automatically blocks out interfering infrared light during the day and turns off the IR cut filter (enabling infrared light to pass through) at night. This combination of ICR day/night function and Lumii Technology ensures perfect image captures and outstanding images at all times.



MEGASSOA:Color Mode



MEGASSOA:ICR day/night

Uniform Light Intensity

Lumii™ II Technology with uniform light intensity design minimizes aberrations and delivers perfect image quality in low light conditions. Each part of a picture has uniformly high resolution and contrast from the center to the edges of the image field. They further facilitate identification by making images clearer and brighter while also reducing image noise.



Conventional



MEGASSOA: Uniform Light Intensity

HyperDynamic

WDR technology uses a detail from a bright area as a standard to adjust exposure values in dark areas, allowing security cameras to capture clear images in extremely high-contrast lighting environments. By using a detected moving object as a reference value to automatically adjust an image's brightness and exposure values, MESSOA's advanced HyperDynamic technology makes detecting moving objects easier to identify regardless of their routes or locations. HyperDynamic also features much higher sensitivity than conventional WDR technology.



MEGASSOA:HyperDynamic off



MEGASSOA:HyperDynamic on

Smart Focus

A built-in nine-point focus indicator enables the camera to focus precisely and automatically on objects, relieving users of the need to adjust the focus manually.



MEGASSOA:Smart Focus off



MEGASSOA:Smart Focus on



Intelligent Detection

The MEGASSOA™ series includes intelligent detection capabilities, including audio detection, face detection, blur detection and detection of camera tampering, such as blocking and spray-painting, and can be configured to send out alarm signals. When the face detection function identifies a face in a scene, it frames it in a green rectangle and automatically tracks it to monitor the subject's behavior and actions. The blur detection function prevents the camera from being affected by external factors such as intended or unintended shaking, while the camera-tampering detection detects outside blocking or spray-painting. Together these capabilities help reduce false alarms and control for unexpected risks in surveillance.



face detection



audio detection



blur detection

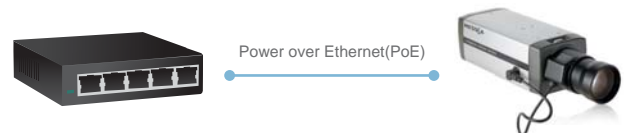


detection of camera tampering



Power over Ethernet (PoE)

The camera utilizes Power over Ethernet (IEEE 802.3af), enabling it to transmit both power and image data through a single Ethernet cable. This feature eliminates the need for additional power supplies and cables when adding cameras or changing layouts, reducing installation and maintenance costs.



ONVIF

This series is compliant with ONVIF (Open Network Video Interface Forum), an open industry forum for the development of a global standard for the interface of network video products. Compliance with this standard guarantees interoperability between network video products regardless of brand. By using it for our MEGASSOA™ series, we ensure that our products can communicate with other ONVIF-compliant network products, facilitating integration and enhancing scalability.



MEGASSOA™ Series

Dome Series



Model	NIC830	NDR890	NDF820	NDF821	NDF831	NDR891
Vandal-proof/IP66	NA	Yes	NA	NA	Yes	Yes
Sensor	1/3" Sony® Progressive CCD	1/2.5" 5M Lumii sensor	1/3" 2M Lumii sensor	1/3" 2M Lumii sensor	1/3" 2M Lumii sensor	1/3" 2M Lumii sensor
DSP	Sony® DSP	TI® DSP	TI® DSP	TI® DSP	TI® DSP	TI® DSP
Max. video resolution (pixels)	1280 X 960	1280 X 720	1920 X 1080 (2MP)	1920 X 1080 (2MP)	1920 X 1080 (2MP)	1920 X 1080 (2MP)
Min. illumination	0.1 lux	0 lux (IR on)	0.3 lux	0.25 lux	0.25 lux (CL)/ 0.1 lux (BW)	0 lux
Compression	Motion JPEG /MPEG-4	Triple: Motion JPEG /MPEG-4 x2	Triple: H.264/ Motion JPEG/MPEG-4	Triple: H.264/ Motion JPEG/MPEG-4	Triple: H.264/ Motion JPEG/MPEG-4	Triple: H.264/ Motion JPEG/MPEG-4
Max. Frame Rate	1280 X 960: PAL @ 12.5 fps,NTSC @ 15 fps 640 X 480: PAL @ 25 fps,NTSC @ 30 fps	MPEG4: 1280 X 720 @ 30fps MJPEG: 640 X 480 @ 30fps	1920X1080@15fps; 1280X720@30fps 1280x960@30fps	1920X1080@15fps; 1280X720@30fps 1280x960@30fps	1920X1080@15fps; 1280X720@30fps 1280x960@30fps	1920X1080@15fps; 1280X720@30fps 1280x960@30fps
IR Distance	NA	25 Meter (82 ft)	NA	NA	NA	25 Meter (82 ft)
Lens	f=2.7-9mm, F1.2 Megapixel DC Iris lens	f=2.7-9mm, F1.2 Megapixel DC Iris lens	f=4mm (optional:2.8mm)	f=3-9mm, F1.2 Megapixel DC Iris lens	f=3-9mm, F1.2 Megapixel DC Iris lens	f=3-9mm, F1.2 Megapixel DC Iris lens
3-Axis rotation	Yes	Yes	Yes	Yes	Yes	Yes
Day/night function	Digital	Mechanical Filter	Digital	Digital	Mechanical Filter	Mechanical Filter
2-way audio	Yes	Yes	NA	Yes	Yes	Yes
SD Card	Yes	Yes	NA	Yes	Yes	Yes
Alarm In/Out	1-in/ 1-out	1-in/ 1-out	NA	2-in/ 1-out	2-in/ 1-out	2-in/ 1-out
TV out	Yes	Yes	Yes	Yes	Yes	Yes
PoE	Yes	Yes	Yes	Yes	Yes	Yes
Intelligent Video	Motion detection	Motion detection	Motion detection	Motion detection Audio detection Blur detection Face detection Tampering detection	Motion detection Audio detection Blur detection Face detection Tampering detection	Motion detection Audio detection Blur detection Face detection Tampering detection
ONVIF	No	No	Yes	Yes	Yes	Yes
Heater	NA	Optional	NA	NA	Optional	Optional

Box Series



Model	NIC835	NIC836	NCB855	NCB855PRO
Sensor	1/3" Sony® Progressive CCD	1/3" Sony® Progressive CCD	1/2.5" 5M Lumii sensor	1/2.5" 5M Lumii sensor
DSP	Sony® DSP	Sony® DSP	TI® DSP	TI® DSP
Max. video resolution (pixels)	1280 X 960	1280 X 960	1280 X 720	2048 X 1536 (3MP)
Min. illumination	0.1 lux	0.1 lux (CL)/0.03 lux (BW)	0.2 lux	0.35 lux(CL)/0.15 lux(BW)
Compression	Motion JPEG /MPEG-4	Motion JPEG/MPEG-4	Motion JPEG/MPEG-4 x 2	Triple: H.264/ Motion JPEG/MPEG-4
Max. Frame Rate	1280 X 960 @10-15 fps 640 X 480 @30 fps	1280 X 960 @10-15 fps 640 X 480 @30 fps	1280 X 720 @30 fps	2048x 1536 @20fps 1920x 1080 @30fps
Lens	Optional	Optional	Optional	Optional
Day/night function	Digital	Mechanical Filter	Digital	Mechanical Filter
2-way audio	Yes	Yes	Yes	Yes
SD Card	Yes	Yes	Yes	Yes
Alarm In/Out	1-in/ 1-out	1-in/ 1-out	1-in/ 1-out	1-in/ 1-out
TV out	Yes	Yes	Yes	Yes
PoE	Yes	Yes	Yes	Yes
Intelligent Video	Motion detection	Motion detection	Motion detection	Motion detection Audio detection Blur detection Face detection Tampering detection
ONVIF	No	No	No	Yes

MEGASSOA™ Series

IR Series



Video Server



Model	NCR875	NCR870	NCR875PRO
Vandal-proof/IP66	Yes	Yes	Yes
Sensor	1/2.5" 5M Lumii sensor	1/3" 2M Lumii sensor	1/3" 2M Lumii sensor
DSP	TI® DSP	TI® DSP	TI® DSP
Max. video resolution (pixels)	1280 X 720	1920 X 1080 (2MP)	1920 X 1080 (2MP)
Min. illumination	0 lux (IR on)	0 lux (IR on)	0 lux (IR on)
Compression	Motion JPEG/MPEG-4	Triple: H.264/Motion JPEG/MPEG-4	Triple: H.264/Motion JPEG/MPEG-4
Max. Frame Rate	MPEG4:1280 X 720 @30fps MJPEG: 640 X 480@30fps	1920X1080@15fps; 1280X720@30fps; 1280x960@30fps	1920X1080@15fps; 1280X720@30fps; 1280x960@30fps
IR Distance	25 Meter (82 ft)	25 Meter (82 ft)	25 Meter (82 ft)
Lens	f=3.3-12mm, F1.6 Megapixel ICR DC Iris lens	f=4mm (optional: 6mm , 8mm)	f=3-9mm, F1.2 Megapixel ICR DC Iris lens 3X Zoom Focus (optional)
Day/night function	Mechanical Filter	Mechanical Filter	Mechanical Filter
2-way audio	Yes	NA	Yes
SD Card	NA	NA	Optional
Alarm In/Out	1 DI,1 DO	NA	2-in/ 1-out
TV out	Yes	Yes	Yes
PoE	Yes	Yes	Yes
Intelligent Video	Motion detection	Motion detection	Motion detection Audio detection Blur detection Face detection Tampering detection
ONVIF	No	Yes	Yes
Heater	NA	Optional	Optional

Model	NVS121A	NVS121H	NVS124A
Features	1-CH MPEG4/MJPEG Video Server	1-CH H.264/MPEG4/MJPEG Video Server	4-CH MPEG4/MJPEG Video Server
Video compression	Dual: MPEG-4/MJPEG	Dual: H.264/ MPEG-4/MJPEG	Dual: MPEG-4/MJPEG
Channel	1	1	4
Max video resolution(pixels)	NTSC: 720 x 480@ 30 fps PAL: 720 x 576@ 25 fps	NTSC: 720 x 480@ 30 fps PAL: 720 x 576@ 25 fps	NTSC: 720 x 480@ 30 fps PAL: 720 x 576@ 25 fps
DI/DO	2/2 (over Ethernet)	2/1	2/2 (over Ethernet)
LAN/ WAN/ TV out	1/ 1/ 1	1/ 1/ 1	1/ 1/ 1
Audio support	Two-way	Two-way	Two-way

PTZ Dome



Model	NDZ860 120X PTZ	NIC910HPRO 216X speed Dome	NIC930HPRO 312X speed Dome	NIC950HPRO 432X speed Dome
1/4" SONY® CCD	Yes	Yes	Yes	Yes
SONY® zoom lens	Yes	Yes	Yes	Yes
Optical zoom lens	10X	18X	26X	36X
Digital zoom lens	12X	12X	12X	12X
Lens	f=4.2-42mm, F=1.8-2.9	f=4.1-73.8mm	f=3.5-91mm	f=3.4-122.4mm
Min. illumination(@10 IRE)	0.2 Lux	0.035 Lux (color)/ 0.0005 Lux (B/W)	0.05 Lux (color)/ 0.0075 Lux (B/W)	0.07 Lux (color) /0.0075 Lux (B/W)
Day/night mode	Digital	Mechanical filter	Mechanical filter	Mechanical filter
Video compression	Motion JPEG/MPEG-4	Dual: H.264/MPEG-4/M-JPEG	Dual: H.264/MPEG-4/M-JPEG	Dual: H.264/MPEG-4/M-JPEG
Max video resolution(pixels)	JPEG : 640 x 480 @30fps MPEG4 : 640 x 480 @30 fps	NTSC: Full D1(720 x 480) at 30 fps PAL: Full D1(720 x 576) at 25 fps	NTSC: Full D1(720 x 480) at 30 fps PAL: Full D1(720 x 576) at 25 fps	NTSC: Full D1(720 x 480) at 30 fps PAL: Full D1(720 x 576) at 25 fps
Pan/tilt turbo speed	Up to 300°/200° per sec	Up to 430°/200° per sec	Up to 430°/200° per sec	Up to 430°/200° per sec
Wide dynamic(128X)	N/A	Yes	Yes	Yes
Preset	64	256	256	256
3D privacy zones	8	24	24	24
LAN/WAN/composite output	1/0/0	1/1/1	1/1/1	1/1/1
Vandal proof	N/A	750kg (1653 lb)	750kg (1653 lb)	750kg (1653 lb)
Water proof	N/A	IP66/ IP67	IP66/ IP67	IP66/ IP67
Alarm input/output	1-in/ 1-out	6-in/1-out	6-in/1-out	6-in/1-out
Power supply	AC24V/ PoE* (802.3at)	AC24V	AC24V	AC24V



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