SR Megapixel and HD Lenses

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Invented for life

- ▶ SR megapixel optical resolution
- ▶ High-quality optics
- ▶ Reliable, robust construction
- ▶ Focal length options

As surveillance cameras can now capture even higher picture resolutions through the use of HD sensor technology and advanced processing, the lenses also need to have an optical resolution that allows the camera to work at its optimal point. This range of Super Resolution (SR) megapixel lenses is designed to provide improved image resolution and sharpness, and better depth of field.
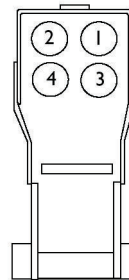
System overview

These lenses come with a standard C or CS mount for use with a variety of cameras. The DC-iris control connection is a four-pin standard plug that fits directly into the camera's iris output. The lenses deliver impressive optical quality due to their megapixel resolution, contrast reproduction, and coating. The mechanical construction is designed to withstand both frequent iris control operations and the environmental stress of security installations. They provide long and reliable operation with no maintenance. For flexible, high-quality, reliable lenses that match a HD camera's performance, this series is the ideal solution.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Europe	CE	3MP
	CE	5MP
	CE	LVF-5005N-S1250
	CE	LVF-5003N-S3813
	CE	LVF-5005C-S4109

Installation/configuration notes

4-pin DC-iris connector (front view)

Pin 1:   Damping coil -

Pin 2:   Damping coil +

Pin 3:   Driving coil + (open)

Pin 4:   Driving coil -

Technical specifications

LVF-5005C-S1803

Maximum sensor format	1/2.5-inch (Sensor diagonal 7.2 mm)
Optical resolution	5 Megapixels
Focal length	1.8 – 3 mm
Iris range	F1.8 to F8
Min object distance	0.5 m (1.64 ft)
Back focus distance (values in air)	8.3 mm (0.33 in)
Weight	63 g (0.134 lb)
Dimensions	Ø 50 mm x 49.3 mm
Lens mount	CS
Angle of view (HxV) 4:3	115 x 99° Wide 88 x 71° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	109 x 82° Wide 82 x 54° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	116 x 84° Wide 89 x 57° Tele
Angle of view (HxV) 1/2.8-inch sensor 16:9	114 x 82° Wide 86 x 56° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to+50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +70°C (-40°F to + 158°F)
- Operating Humidity	Up to 93% non-condensing
- Certification	CE

LVF-5003N-S3813

Maximum sensor format	1/2-inch
Optical resolution	3 Megapixels
Focal length	3.8 – 13 mm
Iris range	F1.4 to F8

LVF-5003N-S3813

Min object distance	0.3 m (1 ft)
Back focus distance (values in air)	10.6 mm (0.42 in)
Weight	80 g (0.18 lb)
Dimensions	Ø 45.7 mm x 64.2 mm
Lens mount	C
Angle of view (HxV) 4:3	97 x 72° Wide 28 x 21° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	79 x 43° Wide 23 x 13° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	87 x 47° Wide 25 x 14° Tele
Angle of view (HxV) 1/2.8-inch sensor 16:9	84 x 46° Wide 25 x 14° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	No
Environmental	
- Operating Temperature	-10°C to+50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +70°C (-40°F to + 158°F)
- Operating Humidity	Up to 93% non-condensing
- Certification	CE

LVF-5005C-S4109

Maximum sensor format	1/1.8-inch
Optical resolution	5 Megapixels
Focal length	4.1 – 9 mm
Iris range	F1.6 to F8
Min object distance	0.3 m (1 ft)
Back focus distance (values in air)	12.72 mm (wide), 19.94 mm (tele)
Weight	130 g (0.29 lb)
Dimensions	Ø 62.9 mm (excluding focus and zoom knobs) x 66.6 mm (excluding flange)
Lens mount	CS
Angle of view (HxV) 4:3	100° x 74° Wide 45° x 33° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	73 x 41° Wide 33 x 19° Tele

LVF-5005C-S4109

Angle of view (HxV) 1/2.7-inch sensor 16:9	80 x 44° Wide 37 x 21° Tele
Angle of view (HxV) 1/1.8-inch sensor 16:9	101 x 56° Wide 46 x 26° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to+50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +70°C (-40°F to + 158°F)
- Operating Humidity	Up to 93% non-condensing
- Certification	CE

LVF-5005C-S0940

Maximum sensor format	1/2.5-inch (Sensor diagonal 7.2 mm)
Optical resolution	5 Megapixels
Focal length	9 – 40 mm
Iris range	F1.5 to F8
Min object distance	2.5 m (8.2 ft)
Back focus distance (values in air)	8.6 mm (wide); 13.19 mm (tele)
Weight	88 g (0.19 lb)
Dimensions	Ø 55 mm x 49.3 mm
Lens mount	CS
Angle of view (HxV) 4:3	36 x 27° Wide; 8.5 x 6.3° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	33 x 17° Wide; 7.7 x 4.4° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	37 x 20° Wide; 8.6 x 4.8° Tele
Angle of view (HxV) 1/2.8-inch sensor 16:9	35 x 20° Wide; 8 x 5° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	

LVF-5005C-S0940

- Operating Temperature	-10°C to+50°C (+14°F to +122°F)
- Storage Temperature	-40°C to +70°C (-40°F to + 158°F)
- Operating Humidity	Up to 93% non-condensing
- Certification	CE

LVF-5005N-S1250

Maximum sensor format	1/1.8-inch
Optical resolution	5 Megapixels
Focal length	12 – 50 mm
Iris range	F1.8 to T360
Min object distance	0.8 m (2.63 ft)
Back focus distance (values in air)	10.19 mm (wide), 10.12 mm (tele) values in air
Weight	175 g (0.386 lb)
Dimensions	Ø 52.4 mm x 89.3 mm
Lens mount	C
Angle of view (HxV) 4:3	33 x 25° Wide 8 x 6° Tele
Angle of view (HxV) 1/3-inch sensor 16:9	24 x 14° Wide 6 x 3° Tele
Angle of view (HxV) 1/2.7-inch sensor 16:9	27 x 16° Wide; 6.7 x 3.8° Tele
Angle of view (HxV) 1/1.8-inch sensor 16:9	33 x 19° Wide; 8.3 x 4.7° Tele
Iris control	4-pin, DC control
Focus ctrl	manual
Zoom ctrl	manual
IR corrected	yes
Environmental	
- Operating Temperature	-10°C to+50°C (+14°F to +122°F)
- Storage Temperature	-20°C to +60°C (-4°F to + 140°F)
- Operating Humidity	35% to 90% non-condensing
- Certification	CE

Ordering information

Varifocal SR Megapixel Lens 9-40mm
Varifocal SR megapixel IR corrected lens with 1/2.5"
sensor and CS-mount
Order number **LVF-5005C-S0940**

Varifocal SR Megapixel Lens 3.8-13mm
Varifocal SR megapixel lens with 1/2" sensor and C-mount
Order number **LVF-5003N-S3813**

Varifocal SR Megapixel Lens 1.8-3mm
Varifocal SR megapixel IR corrected lens with 1/2.5" sensor and CS-mount
Order number **LVF-5005C-S1803**

Varifocal SR Megapixel Lens 4.1-9mm
Varifocal SR megapixel IR corrected lens with 1/1.8" sensor and CS-mount
Order number **LVF-5005C-S4109**

Varifocal Megapixel Lens 12.5-50mm
Varifocal megapixel IR corrected lens with 1/1.8" sensor max and C-mount
Order number **LVF-5005N-S1250**