

**ADL**

# **“pro”fessional solution**

*for 24-hour surveillance*



**Advanced Developers Laboratory**

## **ADL, Inc**

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## Company Profile

### Company Name:

ADL Inc.

### Address:

Ueno Bldg. 5F, 1-17-5 Koenji-kita, Suginami-ku, Tokyo 166-0002  
Tel / Fax: +81-3-5318-1420 / +81-3-5318-1421

### Capital:

68.2 million yen

### Business:

Design, Development, Sales of Optical Products

### Corporate Executive:

Toshihiko Arako, CEO  
Takanori Shibata, CTO

### Employee:

11(plus 1 outsource designer)

### Main Customer:

Domestic Camera Manufacturers and System Integrators  
Overseas Camera Manufacturers and System Integrators

## Company History



## ADVANCED DEVELOPERS LABORATORY

ADL is the global company who specialize in designing Optical lens for CCTV Surveillance market, FA market and more, with over 30 years experience.

ADL's basic philosophy is to stay by customers and make all-out efforts to materialize customers' requirement.

Our expertise is to meet with ODM requirement with highest level of designing powers.

Some of our advantages are:

- ▶ Top level design
- ▶ Shorter lead time for development
- ▶ Consistency in maintaining high quality
- ▶ Competitive price
- ▶ Excellent and prompt technical support

Our design does not stop at normal Visible lens but can be extended to SWIR, LWIR, Mirror lens, UV lens etc.

ADL is the best partner if you are looking for high quality product with best technical support and services. You will never be disappointed.

### Some of our Custom-made Achievements

#### SECURITY

Board Mount Lens designed for Multi sensor Panorama Camera

#### INDUSTRY

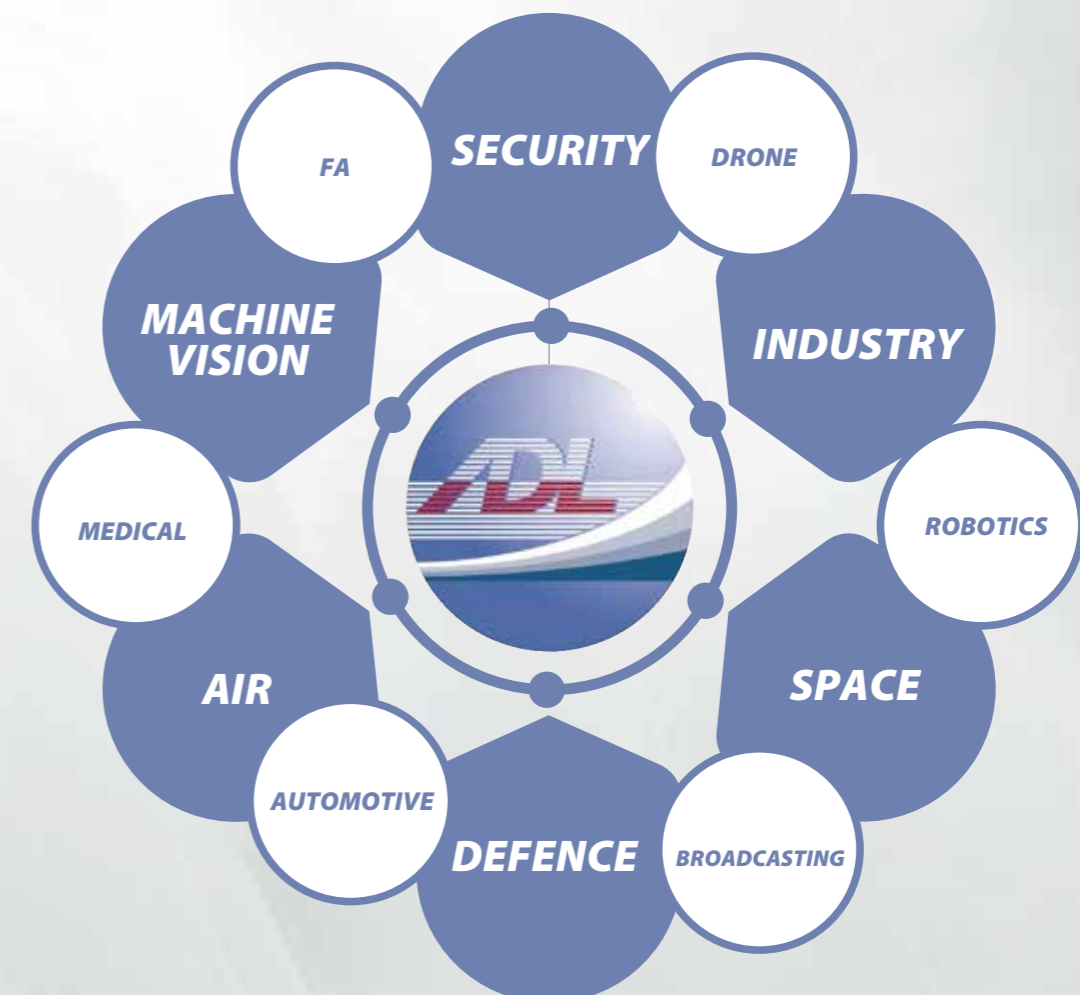
Board Mount Lens designed for Handheld 3D Scanner application

#### DEFENSE

SWIR Lens designed for UAV System

#### UAV

Reflex(Mirror) Lens designed for Multi Sensor Camera



## Products Index

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## Icon Definition

 Mega Pixel Resolution

 Motorized  
(Board Mount lens)

 Format Size

 Temperature Focusing Control

 Iris Type

 Fog Free Visible Cut Filter

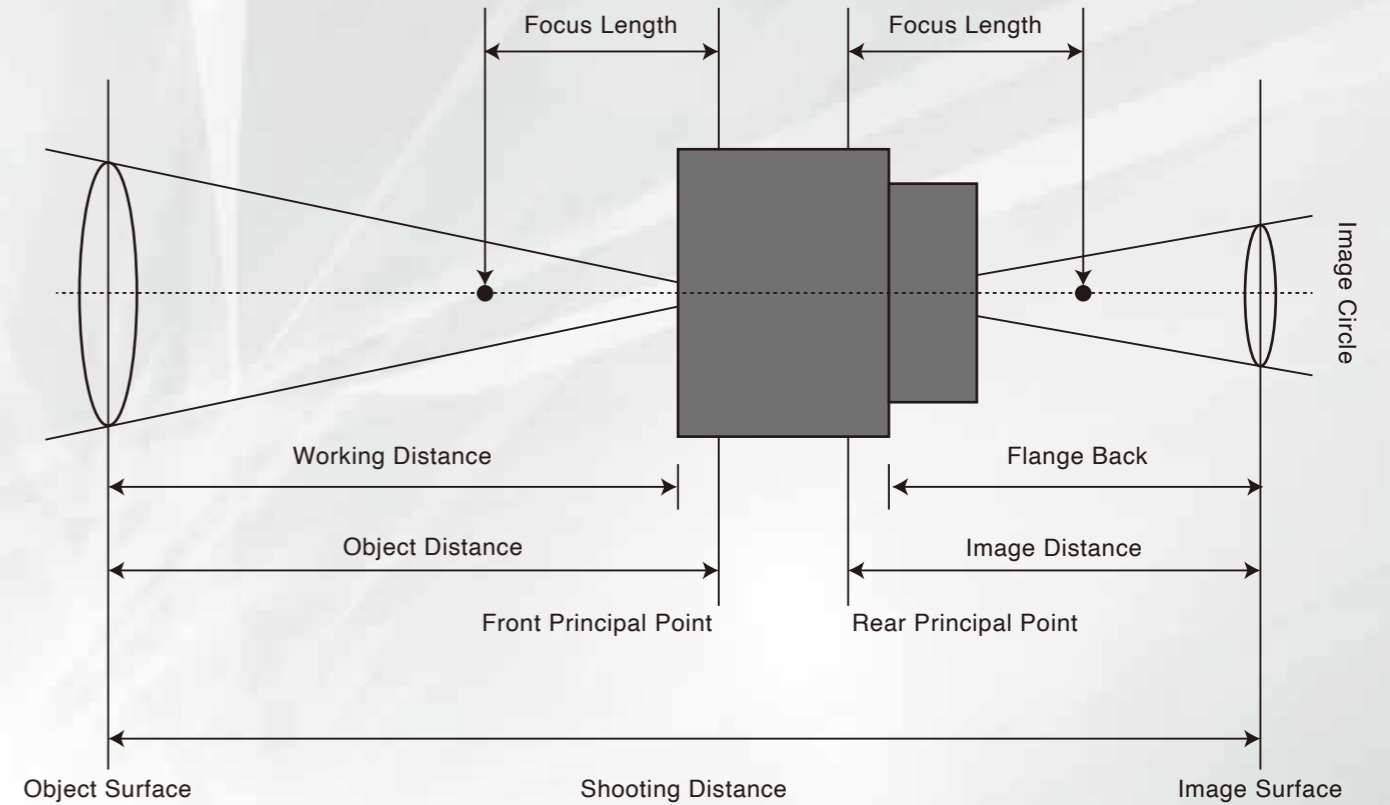
 IR Corrected

 Auto Focus

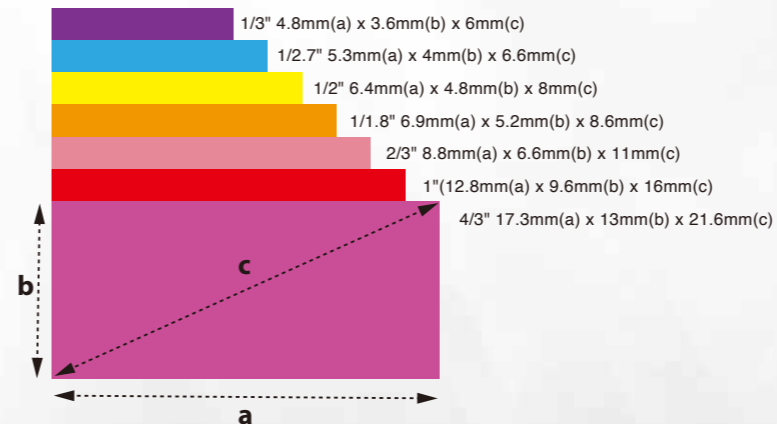
 Preset Potentiometer

 Others (IP66 Low Distortion)

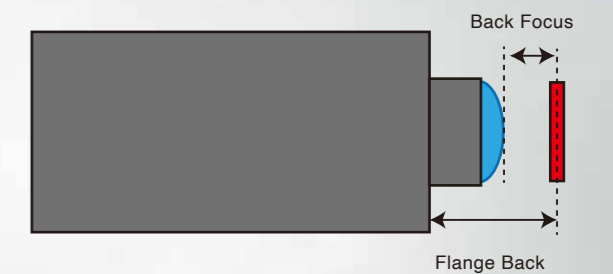
## Glossery



## Sensor Size



## Flange Back/Back Focus



## Temperature Focusing Control

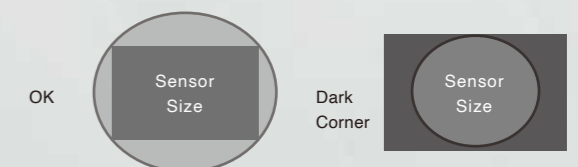
"TFC" correct focus shift under  $-10^{\circ}$ ~ $50^{\circ}$  environment temperature change, so no need to readjust the focus between  $-10^{\circ}$ ~ $50^{\circ}$  (Wide-end only).

## Image Format and Sensor Size

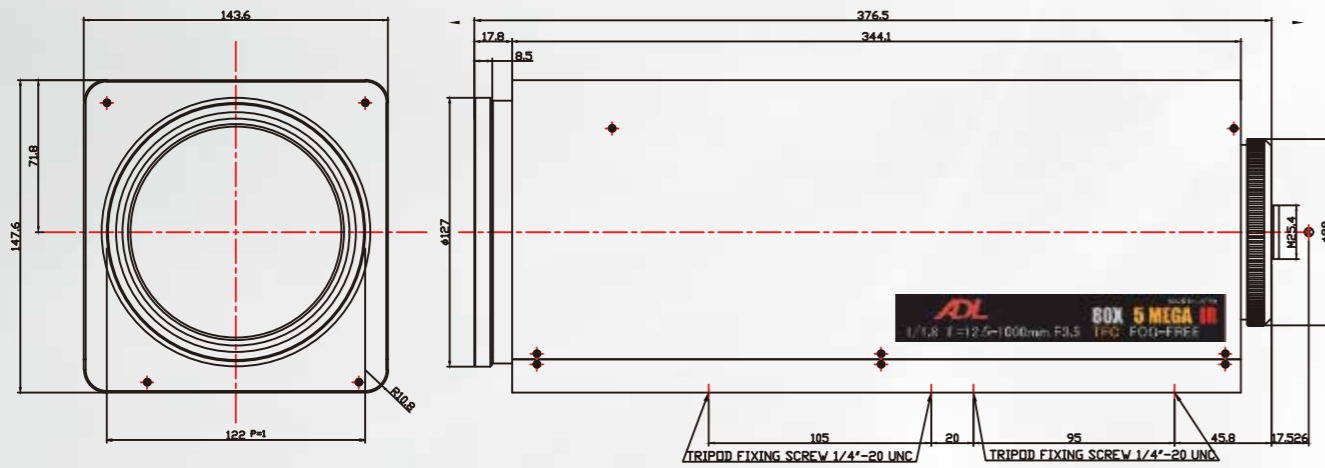
Lens Image Format and Camera sensor varied in size. Most common sizes are:

4/3" > 1" > 2/3" > 1/2" > 1/3"

When choosing a lens, please select a lens with bigger format size than the camera sensor size to avoid dark corner (vignetting).

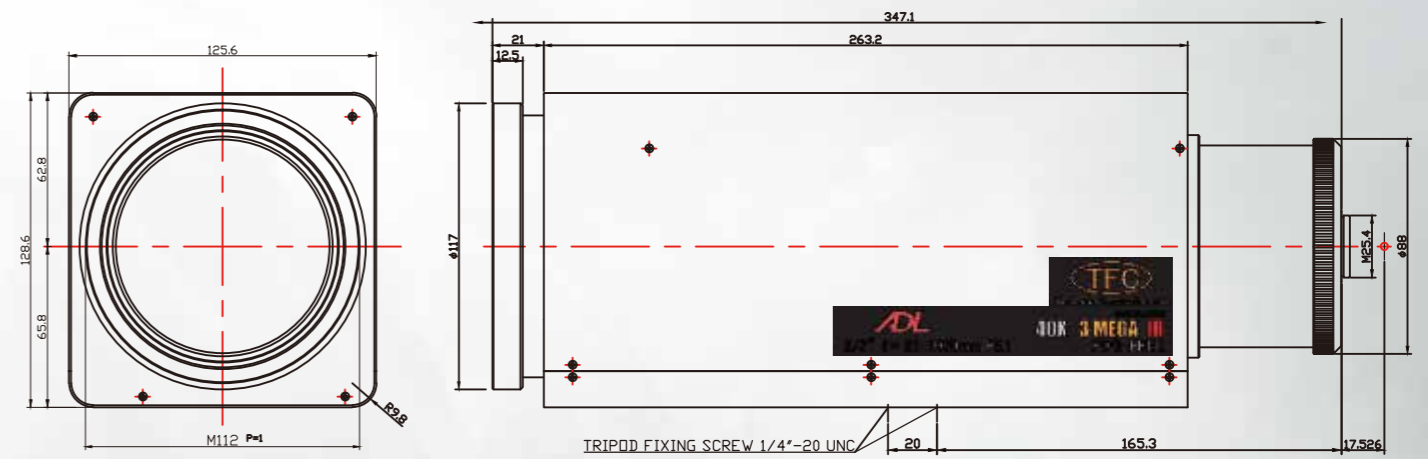


# Motorized Zoom Lens



HZ80X1235DPFIR-T			
Format Size	1/1.8"	Mount	C
Focal Length	12.5-1000mm	Size(mm)	147.6×143.6×376.5
F-Stop	F3.5	Weight(g)	7350
Field of View (H)	33.9° ~0.42°	Resolution	5 Mega Pixel

- 5 MEGA
- 1/1.8"
- DC AUTO IRIS
- IR
- PRESET
- FOG FREE
- TFC
- AF Optional



MZ40X2751DPFIR-T			
Format Size	2/3"	Mount	C
Focal Length	27-1070mm	Size(mm)	128.6x125.6x347.1
F-Stop	F5.1	Weight(g)	5000
Field of View (H)	17.3°~0.50°	Resolution	3 Mega Pixel

- 3 MEGA
- 2/3"
- DC AUTO IRIS
- IR
- PRESET
- FOG FREE
- TFC
- AF Optional

# Motorized Zoom Lens



MZ35X2142DPFIR-T



MZ35X2142DPFIR-T-MO

MZ35X2142DPFIR-T			
Format Size	2/3"	Mount	C
Focal Length	21-750mm	Size(mm)	128.6x125.6x330.5
F-Stop	F4.2	Weight(g)	5000
Field of View (H)	23°~0.67°	Resolution	3 Mega Pixel

- 3 MEGA
- 2/3"
- DC AUTO IRIS
- IR
- PRESET
- FOG FREE
- TFC
- AF Optional

MZ35X2142DPFIR-T-MO			
Format Size	2/3"	Mount	C
Focal Length	21-750mm	Size(mm)	128.6x125.6x330.5
F-Stop	F4.2	Weight(g)	5000
Field of View (H)	23°~0.67°	Resolution	3 Mega Pixel

- 3 MEGA
- 2/3"
- Manual Override IRIS
- IR
- PRESET
- FOG FREE
- TFC
- AF Optional



MZ35X1428DPFIR-T



MZ38X4179DPFIR-T

MZ35X1428DPFIR-T			
Format Size	2/3"	Mount	C
Focal Length	14.5-500mm	Size(mm)	128.6x125.6x278.3
F-Stop	F2.8	Weight(g)	4500
Field of View (H)	34°~1.0°	Resolution	3 Mega Pixel

- 3 MEGA
- 2/3"
- DC AUTO IRIS
- IR
- PRESET
- FOG FREE
- TFC
- AF Optional

MZ38X4179DPFIR-T			
Format Size	2/3"	Mount	C
Focal Length	41-1560mm	Size(mm)	128.6x125.6x347.1
F-Stop	F7.9	Weight(g)	5000
Field of View (H)	11.6°~0.34°	Resolution	2 Mega Pixel

- 2 MEGA
- 2/3"
- DC AUTO IRIS
- IR
- PRESET
- FOG FREE
- TFC
- AF Optional

## Motorized Zoom Lens



HZ250X1046DPFIR



HZ20X1225DPIR

HZ50X1046DPFIR			
Format Size	1/1.8"	Mount	C
Focal Length	10-500mm	Size(mm)	90x90x175.5
F-Stop	F4.6	Weight(g)	1400
Field of View (H)	35.1°~0.8°	Resolution	2 Mega Pixel



HZ20X1225DPIR			
Format Size	1/2"	Mount	C
Focal Length	12-240mm	Size(mm)	103x97.5x200.5
F-Stop	F2.5	Weight(g)	1600
Field of View (H)	29.16°~1.56°	Resolution	2 Mega Pixel



## CS-mount Varifocal Lens



MTV3X2812D

MTV3X2812S

MSV3X3113D

MTV3X2812D			
Format Size	1/3"	Mount	CS
Focal Length	2.8-9mm	Size(mm)	φ36.5 x 48.7
F-Stop	F1.2	Weight(g)	55
Field of View (H)	107.4°~34.5°	Resolution	3 Mega Pixel



MTV3X2812S			
Format Size	1/3"	Mount	CS
Focal Length	2.8-9mm	Size(mm)	φ36.5 x 48.7
F-Stop	F1.2	Weight(g)	55
Field of View (H)	107.4°~34.5°	Resolution	3 Mega Pixel



MSV3X3113D			
Format Size	1/2.7"	Mount	CS
Focal Length	3.1-9mm	Size(mm)	φ36.5 x 48.7
F-Stop	F1.3	Weight(g)	55
Field of View (H)	111.4°~38.6°	Resolution	3 Mega Pixel



# CS-mount Varifocal Lens



MSV3X3113S

MSV7X7515D

MSV7X7516S

MSV3X3113S			
Format Size	1/2.7"	Mount	CS
Focal Length	3.1-9mm	Size(mm)	φ36.5 x 48.7
F-Stop	F1.3	Weight(g)	55
Field of View (H)	111.4°~38.6°	Resolution	3 Mega Pixel

3 MEGA 1/2.7" P IRIS  
IR

MSV7X7515D			
Format Size	1/2.7"	Mount	CS
Focal Length	7.5-50mm	Size(mm)	φ46.3 x 68.4
F-Stop	F1.5	Weight(g)	162
Field of View (H)	42.2°~6.8°	Resolution	3 Mega Pixel

3 MEGA 1/2.7" DC AUTO IRIS  
IR

MSV7X7516S			
Format Size	1/2.7"	Mount	CS
Focal Length	7.5-50mm	Size(mm)	φ46.3 x 68.4
F-Stop	F1.6	Weight(g)	162
Field of View (H)	42.2°~6.8°	Resolution	3 Mega Pixel

3 MEGA 1/2.7" P IRIS  
IR



MSV7X0716D

MSV7X0716S

MSV7X0716D			
Format Size	1/2.7"	Mount	CS
Focal Length	7-50mm	Size(mm)	42 x 47 x 64
F-Stop	F1.6	Weight(g)	125
Field of View (H)	41.3°~6.0°	Resolution	2 Mega Pixel

2 MEGA 1/2.7" DC AUTO IRIS  
IR

MSV7X0716S			
Format Size	1/2.7"	Mount	CS
Focal Length	7.5-50mm	Size(mm)	42 x 47 x 64
F-Stop	F1.6	Weight(g)	125
Field of View (H)	41.3°~6.0°	Resolution	2 Mega Pixel

2 MEGA 1/2.7" P IRIS  
IR

# Board Mount Varifocal Lens



MSVF3.3X0315IR-BCDN-MD

MSVF3.3X0315IR-BCPN-MD

MSVF3X3313IR3-BCDN



MSVF3X3313IR3-BCDN-MD

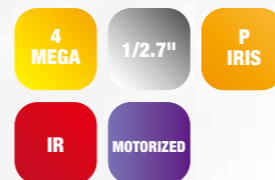
MSVF3X3313IR3-BCPN

MSVF3X3313IR3-BCPN-MD

MSVF3.3X0315IR-BCDN-MD			
Format Size	1/2.7"	Mount	φ14
Focal Length	3-10mm	Size(mm)	φ29 x 39.1
F-Stop	F1.5	Weight(g)	26.5
Field of View (H)	118.4°~35.2°	Resolution	4 Mega Pixel



MSVF3.3X0315IR-BCPN-MD			
Format Size	1/2.7"	Mount	φ14
Focal Length	3-10mm	Size(mm)	φ29 x 39.1
F-Stop	F1.5	Weight(g)	25
Field of View (H)	118.4°~35.2°	Resolution	4 Mega Pixel



MSVF3X3313IR3-BCDN			
Format Size	1/2.7"	Mount	φ14
Focal Length	3.3-10mm	Size(mm)	φ29 x 37.9
F-Stop	F1.3	Weight(g)	24
Field of View (H)	104.8°~34.8°	Resolution	3 Mega Pixel



MSVF3X3313IR3-BCDN-MD			
Format Size	1/2.7"	Mount	φ14
Focal Length	3.3-10mm	Size(mm)	φ29 x 37.9
F-Stop	F1.3	Weight(g)	28.5
Field of View (H)	104.8°~34.8°	Resolution	3 Mega Pixel



MSVF3X3313IR3-BCPN			
Format Size	1/2.7"	Mount	φ14
Focal Length	3.3-10mm	Size(mm)	φ29 x 37.9
F-Stop	F1.3	Weight(g)	22.5
Field of View (H)	104.8°~34.8°	Resolution	3 Mega Pixel



MSVF3X3313IR3-BCPN-MD			
Format Size	1/2.7"	Mount	φ14
Focal Length	3.3-10mm	Size(mm)	φ29 x 37.9
F-Stop	F1.3	Weight(g)	25
Field of View (H)	104.8°~34.8°	Resolution	3 Mega Pixel





# Fisheye & Machine Vision Lens



HFE1414C

HFE1414C			
Format Size	1/2.3"	Mount	C
Focal Length	1.4mm	Size(mm)	φ43 x 53.1
F-Stop	F1.4	Weight(g)	116
Field of View (H)	185°	Resolution	5 Mega Pixel

5 MEGA 1/2.3" FIX IRIS  
FISHEYE



VFA2520-10M

VFA2520-10M			
Format Size	4/3"	Mount	C
Focal Length	25mm	Size(mm)	φ48 x 82.7
F-Stop	F2-F22	Weight(g)	250
Field of View (H)	40.6°	Resolution	10 Mega Pixel

10 MEGA 4/3" MANUAL IRIS



VFA3520-10M

VFA3520-10M			
Format Size	4/3"	Mount	C
Focal Length	35mm	Size(mm)	φ44.6 x 54.9
F-Stop	F2-F22	Weight(g)	173
Field of View (H)	29.6°	Resolution	10 Mega Pixel

10 MEGA 4/3" MANUAL IRIS

VFA5020-10M	
Format Size	4/3"
Focal Length	50mm
F-Stop	F2-F22
Field of View (H)	20.9°
Mount	C
Size(mm)	φ44.6 x 53.7
Weight(g)	170
Resolution	10 Mega Pixel



10 MEGA 4/3" MANUAL IRIS

VFA1214-5M	
Format Size	1"
Focal Length	12mm
F-Stop	F1.4
Field of View (H)	53°
Mount	C
Size(mm)	φ50 x 64.9
Weight(g)	180
Resolution	5 Mega Pixel



5 MEGA 1" MANUAL IRIS

VFA1614-5M	
Format Size	1"
Focal Length	16mm
F-Stop	F1.4
Field of View (H)	42°
Mount	C
Size(mm)	φ41.5 x 55.6
Weight(g)	180
Resolution	5 Mega Pixel



5 MEGA 1" MANUAL IRIS

VFA2514-5M	
Format Size	1"
Focal Length	25mm
F-Stop	F1.4
Field of View (H)	28°
Mount	C
Size(mm)	φ39 x 38.42
Weight(g)	120
Resolution	5 Mega Pixel



5 MEGA 1" MANUAL IRIS

VFA3520-5M	
Format Size	1"
Focal Length	35mm
F-Stop	F2
Field of View (H)	20°
Mount	C
Size(mm)	φ37 x 40
Weight(g)	120
Resolution	5 Mega Pixel



5 MEGA 1" MANUAL IRIS

# Fisheye & Machine Vision Lens

VFA5020-5M	
Format Size	1"
Focal Length	50mm
F-Stop	F2
Field of View (H)	14.4°
Mount	C
Size(mm)	φ45 x 60
Weight(g)	200
Resolution	5 Mega Pixel



5 MEGA 1" MANUAL IRIS

HFA1214-3M	
Format Size	1/1.8"
Focal Length	12mm
F-Stop	F1.4
Field of View (H)	32.38°
Mount	C
Size(mm)	φ29.5 x 35.7
Weight(g)	57
Resolution	3 Mega Pixel



3 MEGA 1/1.8" MANUAL IRIS

MFA1614-3M	
Format Size	2/3"
Focal Length	16mm
F-Stop	F1.4
Field of View (H)	30.99°
Mount	C
Size(mm)	φ29.5 x 37.2
Weight(g)	64
Resolution	3 Mega Pixel



3 MEGA 2/3" MANUAL IRIS

MFA2514-3M	
Format Size	2/3"
Focal Length	25mm
F-Stop	F1.4
Field of View (H)	19.98°
Mount	C
Size(mm)	φ29.5 x 38.9
Weight(g)	56
Resolution	3 Mega Pixel



3 MEGA 2/3" MANUAL IRIS

MFA3516-3M	
Format Size	2/3"
Focal Length	35mm
F-Stop	F1.6
Field of View (H)	14.74°
Mount	C
Size(mm)	φ29.5 x 40.8
Weight(g)	65
Resolution	3 Mega Pixel



3 MEGA 2/3" MANUAL IRIS

MFA5020-3M	
Format Size	2/3"
Focal Length	50mm
F-Stop	F2.8
Field of View (H)	10.03°
Mount	C
Size(mm)	φ29.5 x 38
Weight(g)	55
Resolution	3 Mega Pixel



3 MEGA 2/3" MANUAL IRIS

MFA3520	
Format Size	2/3"
Focal Length	35mm
F-Stop	F2
Field of View (H)	14.3°
Mount	C
Size(mm)	φ29 x 38.5
Weight(g)	55
Resolution	3 Mega Pixel



3 MEGA 2/3" MANUAL IRIS

MFA5028	
Format Size	2/3"
Focal Length	50mm
F-Stop	F2.8
Field of View (H)	9.9°
Mount	C
Size(mm)	φ29 x 38.5
Weight(g)	55
Resolution	3 Mega Pixel



3 MEGA 2/3" MANUAL IRIS

MFA2514	
Format Size	2/3"
Focal Length	25mm
F-Stop	F1.4
Field of View (H)	20.1°
Mount	C
Size(mm)	φ29 x 31.5
Weight(g)	45
Resolution	2 Mega Pixel



2 MEGA 2/3" MANUAL IRIS

HFA0614	
Format Size	1/2"
Focal Length	6mm
F-Stop	F1.4
Field of View (H)	57.4°
Mount	C
Size(mm)	φ32 x 37.5
Weight(g)	6.5
Resolution	1.3 Mega Pixel



1.3 MEGA 1/2" MANUAL IRIS

# Fisheye & Machine Vision Lens

VFA2595H	
Format Size	1
Focal Length	25mm
F-Stop	F0.95
Field of View (H)	28.7°
Mount	C
Size(mm)	φ41.8 x 45.2
Weight(g)	165
Resolution	1.3 Mega Pixel



1.3 MEGA 1" MANUAL IRIS

VFA5095H	
Format Size	1"
Focal Length	50mm
F-Stop	F0.95
Field of View (H)	14.6°
Mount	C
Size(mm)	φ65 x 74.1
Weight(g)	470
Resolution	1.3 Mega Pixel



1.3 MEGA 1" MANUAL IRIS

MFA1614	
Format Size	2/3"
Focal Length	16mm
F-Stop	F1.4
Field of View (H)	30.7°
Mount	C
Size(mm)	φ29 x 29.5
Weight(g)	42
Resolution	1 Mega Pixel



MEGA 2/3" MANUAL IRIS

MFA1795H	
Format Size	2/3"
Focal Length	17mm
F-Stop	F0.95
Field of View (H)	29°
Mount	C
Size(mm)	φ42 x 63.2
Weight(g)	165
Resolution	VGA



2/3" MANUAL IRIS

# Board Mount Fix Focal Lens

S0415-8M	
Format Size	1/2.7"
Focal Length	4mm
F-Stop	F1.5
Field of View (H)	88°
Mount	M12
Resolution	8 Mega Pixel



8 MEGA 1/2.7" FIXED IRIS LOW DISTORTION

T1419-MW(IP66)	
Format Size	1/3"
Focal Length	1.4mm
F-Stop	F1.9
Field of View (H)	220°
Mount	M12
Resolution	Mega Pixel



MEGA 1/3" FIXED IRIS FISHEYE IP66

T1419-M	
Format Size	1/3"
Focal Length	1.4mm
F-Stop	F1.9
Field of View (H)	220°
Mount	M12
Resolution	Mega Pixel



MEGA 1/3" FIXED IRIS FISHEYE

S1320-M	
Format Size	1/2.7"
Focal Length	1.3mm
F-Stop	F2.0
Field of View (H)	190°
Mount	M12
Resolution	Mega Pixel



MEGA 1/2.7" FIXED IRIS FISHEYE

# Board Mount Fix Focal Lens

S2820-M	
Format Size	1/2.7"
Focal Length	2.8mm
F-Stop	F2.0
Field of View (H)	120°
Mount	M12
Resolution	Mega Pixel



MEGA 1/2.7" FIXED IRIS

S3620-M	
Format Size	1/2.7"
Focal Length	3.6mm
F-Stop	F2.0
Field of View (H)	90°
Mount	M12
Resolution	Mega Pixel



MEGA 1/2.7" FIXED IRIS

S0620-M	
Format Size	1/2.7"
Focal Length	6mm
F-Stop	F2.0
Field of View (H)	60°
Mount	M12
Resolution	Mega Pixel



MEGA 1/2.7" FIXED IRIS

S0820-M	
Format Size	1/2.7"
Focal Length	8mm
F-Stop	F2.0
Field of View (H)	45°
Mount	M12
Resolution	Mega Pixel



MEGA 1/2.7" FIXED IRIS

# Accessories



FTC-2X
3G- 5E (3 Groups - 5 Elements, All glasses)
Full HD(2 Mega Pixel) Resolution
Keep Original F-Stop (No Degradation)
Double the Focal Length

\*Note: Vignetting appears toward wide side

USB-HYA0B3-NL-0100M/0200M						
Host Connector	Device Connector	Weight	Cable Diameter	Cable Length	Bend Radius	Supply Voltage
USB 3.0 Standard A type	Micro-B type w/ Locking Screw	385g (10m)	4.8mm	10m/20m	50mm	4.75v ~ 5.25v
Supply Current	Power Dissipation	Temperature	Humidity	Pressure	RoHS Compliance	CE / UL Conformity
< 200mA	900 mA	0 ~ 50 °C	15 ~ 85%	700 ~ 1060hPA	●	●

