



Beyond your eyes, The ultimate lens

DAIWON OPTICAL



ABOUT DAIWON

Established in 1988, DAIWON OPTICAL CO., LTD. has been leading manufacturer specialized in wide range of cutting edge lenses optimally designed for CCTV cameras, PC cameras, IP cameras, and the cameras for automotive application. Our accumulated know-how with continual technical enhancement, top-quality oriented management and proactive sales development has rewarded DAIWON OPTICAL as a globally outstanding company that has increased our strong reputation in terms of precision optical expertise.

Experienced of operating a global standard excellence in the quickly paced industries, we have facilitated the innovative and customer satisfied quality lenses starting from construction to counseling, upto actual production

Qualified with ISO 9001: 14000, our rapid responding service and technology are striving with more than decade-experienced engineering workmanship.

DAIWON OPTICAL CO., LTD. is continuously striving to become the most trusted company and to lead the technology for the industry with the best service.

Milestone

2014~2015

Released Automotive Around View Lens

Released 3 Megapixel Pinhole Lens

Released 16 Megapixel Fixed Board Mount for Sports Camera

Acquired ISO TS16949

2010~2013

Released Board Mount Vari-focal Motorized Zoom Lens

Developed 5 Megapixel Fixed C mount lens(f 50mm)

Released 3 Mega-pixel CS Mount Vari-focal Lens and 3Mega Pixel P-Iris Vari-Focal Lens

Released 3 Mega-pixel Board Mount Vari-focal Lens

Appointed as Green partner by Sony Corporation

Acquired ISO 14001

2006~2009

Released Mega-pixel CS Mount Vari-focal Lens

Released Easy-focus Lens and Mega-pixel Board Mount Vari-focal Lens

Released Mega-pixel Board Lens

Released Vari-focal IR Lens

Awarded '10 Million USD Export Prize' , Korea Intenational Trade Association

2000~2005

Released IR Lenses

Released New Vari-focal Lenses

Produced and Exported High Definition Digital Camera Lenses

Acquired ISO 9001

Awarded '5 Million USD Export Prize' , Korea International Trade Association

1988~1999

DAIWON OPTICAL COMPANY established

Started Optical manufacturing business in Camera Lenses and Lenses for Binoculars

Produced and Exported PC and Digital Camera Lenses

Obtained a Patent in field of 'Optical System of the Pinhole Camera Lenses'

Awarded '1 Million USD Export Prize' , Korea International Trade Association

Released and Exported Vari-focal Lens and Aspherical Hybrid Lens

VARIFOCAL CS LENS

- 5M
- 3M
- 1.3M
- VGA



VIR28120-3MASD-CS

Format Size : 1/2.7"
Focal Length : 2.8~12.0mm
Aperture : F1.4
Angle of View : 1/2.7" (H)115.3°~28.3°



VIR40120-3MASD-CS

Format Size : 1/2"
Focal Length : 4.0~12.0mm
Aperture : F1.4
Angle of View : 1/2" (H)95.8°~32.0°



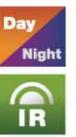
DW28120D-CS

Format Size : 1/3"
Focal Length : 2.8~12.0mm
Aperture : F1.4
Angle of View : 1/3" (H)99.8°~25.0°



DW3080D-CS

Format Size : 1/3"
Focal Length : 3.0~8.0mm
Aperture : F1.4
Angle of View : 1/3" (H)93.4°~34.6°



VIR50500D-CS

Format Size : 1/3"
Focal Length : 5.0~50.0mm
Aperture : F1.4
Angle of View : 1/3" (H)53.4°~5.8°

VARIFOCAL BOARD LENS

- 3M
- 2M
- 1.3M
- VGA



VIR28110-3MASDN

Format Size : 1/3"
Focal Length : 2.8~11.0mm
Aperture : F1.4
Angle of View : 1/2.7" (H)123.5°~36.6°



33120-3MASDN

Format Size : 1/2.7"
Focal Length : 3.3~12.0mm
Aperture : F1.8
Angle of View : 1/2.7" (H)100.1°~29.2°



35160-3MASDN

Format Size : 1/2.7"
Focal Length : 3.5~16.0mm
Aperture : F1.4
Angle of View : 1/2.7" (H)91.6°~24.55°



60500-3MASDN

Format Size : 1/2.7"
Focal Length : 6.0~50.0mm
Aperture : F1.6
Angle of View : 1/2.7" (H)55.8°~6.9°



90220-3MASDN

Format Size : 1/2.7"
Focal Length : 9.0~22.0mm
Aperture : F1.8
Angle of View : 1/2.7" (H)38.2°~16.0°



28110-2MDN

Format Size : 1/2.7"
Focal Length : 2.8~11.0mm
Aperture : F1.6
Angle of View : 1/2.7" (H)120.9°~37.1°



VIR36160MASDN

Format Size : 1/2.7"
Focal Length : 3.6~16.0mm
Aperture : F1.2
Angle of View : 1/2.7" (H)91.6°~24.5°



VIR50500ASDN

Format Size : 1/3"
Focal Length : 5.0~50.0mm
Aperture : F1.4
Angle of View : 1/3" (H)51.5°~6.5°

FISHEYE LENS

- 5M
- VGA



14818-5M

Format Size : Φ 3.202mm
Focal Length : 1.4mm
Aperture : F1.8
Angle of View : 182°



DW9813

Format Size : 1/3"
Focal Length : 1.78mm
Aperture : F3.0
Angle of View : 156.3°

BOARD LENS

3M
VGA



25620-3M

Format Size : 1/2.7"
Focal Length : 2.5mm
Aperture : F2.0
Angle of View : 1/2.7" (H)136.5°



29620-3M

Format Size : 1/2.7"
Focal Length : 2.9mm
Aperture : F2.0
Angle of View : 1/2.7" (H)120.2°



36420-3M

Format Size : 1/2.7"
Focal Length : 3.6mm
Aperture : F2.0
Angle of View : 1/2.7" (H)88.0°



37518-3MAS

Format Size : 1/2.7"
Focal Length : 3.7mm
Aperture : F1.8
Angle of View : 1/2.7" (H)95.9°



43518-3MAS

Format Size : 1/2.7"
Focal Length : 4.3mm
Aperture : F1.8
Angle of View : 1/2.7" (H)82.2°



VIR60618-3M

Format Size : 1/2.7"
Focal Length : 6.0mm
Aperture : F1.8
Angle of View : 1/2.7" (H)55.8°



VIR80618-3M

Format Size : 1/2.7"
Focal Length : 8.0mm
Aperture : F1.8
Angle of View : 1/2.7" (H)40.6°



DW2162

Format Size : 1/3"
Focal Length : 2.1mm
Aperture : F2.0
Angle of View : 1/3" (H)125.9°



DW9611

Format Size : 1/3"
Focal Length : 12mm
Aperture : F2.2
Angle of View : 1/3" (H)20.1°



DW9711

Format Size : 1/3"
Focal Length : 16mm
Aperture : F2.5
Angle of View : 1/3" (H)17.2°



DW25425

Format Size : 2/3"
Focal Length : 25mm
Aperture : F2.5
Angle of View : 2/3" (H)20.1°



DW350420

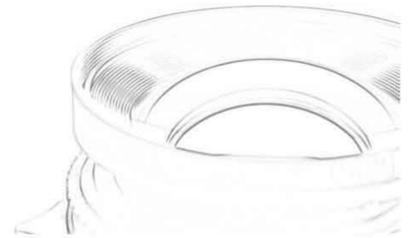
Format Size : 2/3"
Focal Length : 35mm
Aperture : F2.0
Angle of View : 2/3" (H)14.3°



DW500425

Format Size : 1/2"
Focal Length : 50mm
Aperture : F2.5
Angle of View : 1/2" (H)7.3°

Cost Effective Lenses
With The Sharpest
Effects!



SPORTS CAM· DOOR BELL LENS

16M
2M



27629CM-16MAS

Format Size : 1/2.3"
Focal Length : 2.7mm
Aperture : F1.9
Angle of View : 1/2.3" (H)120°



17620-2MAS

Format Size : 1/2.8"
Focal Length : 1.7mm
Aperture : F2.0
Angle of View : 1/3" (H)160°



AUTOMOTIVE LENS

- 3M
- 2M
- 1.3M
- VGA



60620-3M

Format Size : 1/2.7"
Focal Length : 6.0mm
Aperture : F2.3
Angle of View : 1/2.7" (H)56.9°



17620-2M

Format Size : 1/2.8"
Focal Length : 1.7mm
Aperture : F2.0
Angle of View : 1/2.8" (H)190.0°



60520CM-2M

Format Size : 1/3"
Focal Length : 6.0mm
Aperture : F2.0
Angle of View : 1/3" (H)46.7°



10620MAS

Format Size : 1/4"
Focal Length : 0.9mm
Aperture : F2.0
Angle of View : 1/4" (H)190.6°



12624MAS

Format Size : 1/3"
Focal Length : 1.2mm
Aperture : F2.4
Angle of View : 1/3" (H)192.8°



18524MAS

Format Size : 1/3"
Focal Length : 1.8mm
Aperture : F2.4
Angle of View : 1/3" (H)154.3°



19624M-CM

Format Size : 1/3"
Focal Length : 1.89mm
Aperture : F2.4
Angle of View : 1/3" (H)149.0°



DW171525

Format Size : 1/4"
Focal Length : 1.68mm
Aperture : F2.5
Angle of View : 1/4" (H)129.6°



DW178520

Format Size : 1/4"
Focal Length : 1.78mm
Aperture : F2.0
Angle of View : 1/4" (H)142.1°



DW2425F

Format Size : 1/3"
Focal Length : 2.4mm
Aperture : F2.5
Angle of View : 1/3" (H)120.0°



DW245625

Format Size : 1/3"
Focal Length : 2.45mm
Aperture : F2.5
Angle of View : 1/3" (H)123.5°

PINHOLE LENS

- 3M
- 1.3M
- VGA



9803-3MASK

Format Size : 1/2.7"
Focal Length : 4.3mm
Aperture : F2.0
Angle of View : 1/2.7" (H)74.5°



DW9803MASK

Format Size : 1/2.7"
Focal Length : 4.3mm
Aperture : F2.0
Angle of View : 1/2.7" (H)76.4°



DW33524 A/B/K

Format Size : 1/3"
Focal Length : 3.3mm
Aperture : F2.4
Angle of View : 1/3" (H)77.0°



DW9802 A/B/K

Format Size : 1/3"
Focal Length : 3.7mm
Aperture : F2.0
Angle of View : 1/3" (H)67.8°



DW9803 A/B/K

Format Size : 1/3"
Focal Length : 4.3mm
Aperture : F2.0
Angle of View : 1/3" (H)64.6°

PRODUCT RANGE

	MODEL	page	1mm	2mm	3mm	4mm	5mm	6mm	8mm	9mm	11mm	12mm	16mm	20mm	30mm	50mm
V.F. CS LENS	VIR28120-3MASD-CS			2.8-12.0mm												
	VIR40120-3MASD-CS			4.0-12.0mm												
	DW2812D-CS			2.8-12.0mm												
	DW3080D-CS			3.0-8.0mm												
	VIR50500D-CS			5.0-50.0mm												
V.F. BOARD LENS	VIR28110-3MAS			2.8-11.0mm												
	33120-3MAS			3.3-12.0mm												
	35160-3MAS			3.5-16.0mm												
	60500-3MAS			6.0-50.0mm												
	90220-3MAS			9.0-22.0mm												
	28110-2M			2.8-11.0mm												
	VIR36160MAS			3.6-16.0mm												
	VIR50500AS			5.0-50.0mm												
FISHEYE LENS	14818-5M		1.48mm													
	DW9813		1.78mm													
BOARD LENS	25620-3M			2.5mm												
	29620-3M			2.9mm												
	36420-3M				3.6mm											
	37518-3MAS				3.7mm											
	43518-3MAS				4.3mm											
	VIR60618-3M						6.0mm									
	VIR80618-3M							8.0mm								
	DW2162			2.1mm												
	DW9611										12.0mm					
	DW9711												16.0mm			
	DW25425													25.0mm		
	DW35420														35.0mm	
	DW500425															50.0mm
SPORTS CAM / DOOR BELL LENS	27629CM-16MAS				2.7mm											
	17620-2MAS		1.7mm													
AUTOMOTIVE LENS	60620-3M							6.0mm								
	17620-2M		1.7mm													
	60520CM-2M							6.0mm								
	10620MAS		0.9mm													
	12624MAS		1.2mm													
	18524MAS		1.8mm													
	19624M-CM		1.89mm													
	DW171525		1.68mm													
	DW178520		1.78mm													
	DW2425F			2.4mm												
	DW245625			2.45mm												
	PINHOLE LENS	9803-3MASK					4.3mm									
DW9803MASK						4.3mm										
DW33524 A/B/K					3.3mm											
DW9802 A/B/K					3.7mm											
DW9803 A/B/K					4.3mm											

16M 5M 3M 2M 1.3M VGA



16 Mega Pixel Lens



5 Mega Pixel Lens



3 Mega Pixel Lens



2 Mega Pixel Lens



1.3 Mega Pixel Lens



IR Cut Filter Removable Day & Night Lens



P-IRIS



Motor Control



IR Corrected Lens



Aspherical Lens



Weather Proof



Black Box



Rear View



Around View Monitoring



Lane Departure Warning System



Dual Band



Sports Cam



Door Bell

THE ULTIMATE LENSES FOR EVERY INDUSTRY

Over 20 years in the lens business, we have evolved into a total solutions provider, offering a wide array of lenses that caters to various markets.

Our catalog features over 200 models, including high-definition megapixel lenses, ranging from pinhole and fixed-board to varifocal-board and C-/CS-mount models.

The featured lenses are our latest releases. They can utilize any aspect ratio without losing their resolution during enlargement, and are embedded with IR-cut filters for day or night use.

What's more is that they're compatible with color and black/white cameras.



www.dwopt.com

Beyond Your Eyes
The Ultimate Lens

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DIGITAL ACCESS CONTROL SYSTEM

During the period of rapid changes in bio enable iris scanner used in wide range of access control system, non-contact entry/exit control, has been on the increase as people want to keep their lives more convenient and more secure. Designed to optimized for electronic access control system, Daiwon lenses for bio-iris scanner is the latest development used for various types of scanning system.



■ OPTICS FOR BIO ENABLE IRIS SCANNER

- High Resolution Iris Image.
- Easy to Operate design.
- Optimal design for the iris scanning software.
- Lens for IR Illumination.
- Lenses designed for Single & Dual Iris Scanner.

■ APPLICATION



Time & Attendance Management



Access Control



Secure Online Transactions



Government & Law Enforcement

SPORTS POV CAM

With a strong presence in extreme action sports, Sports Action Cam allows camera owners to record video from the participant's point of view and to be the center of the action.

Action cameras have evolved beyond extreme sports into the everyday lives of ordinary people allowing them to tell their stories from their point of view.

DAIWON OPTICAL is nowadays expanding into new territories of Point-of-View imaging.

■ DAIWON LENS FOR SPORTS CAM



■ OPTICALLY PLEASING AND STURDILY BUILT

Daiwon Lens Module for POV Sports Cam has optimized the image that has designed to reduce the severe distortion commonly occurred with ghost and lens flare effects. Our remarkable lenses are also built to prevent from extreme climate and environment.

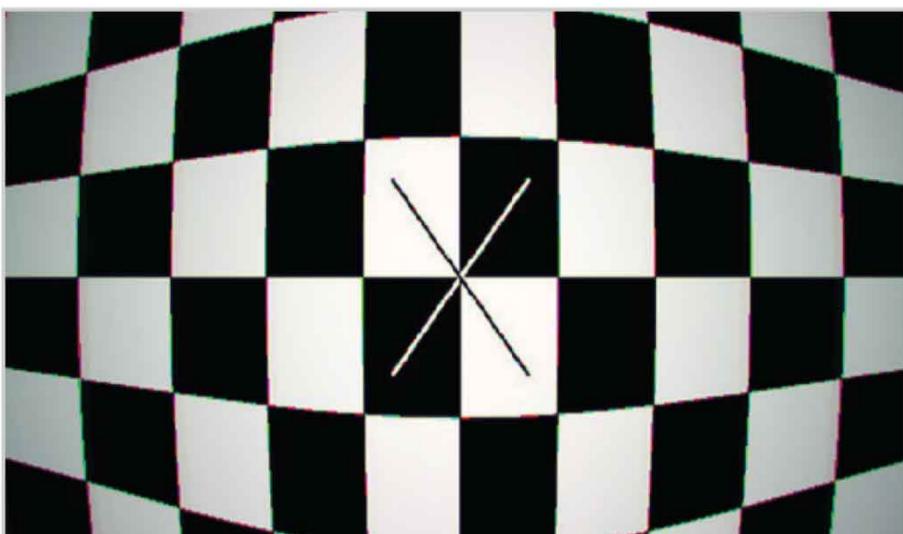


Image Severely Distorted



Distortion Optimized

CAR DVR / DASHBOARD CAM LENSES

Dashboard Cam, also known as dashcam, Car DVR, and Car Cameras, is ever being popular in the automobile market.

Dashboard Cam features realtime record, not more than accidents. Mounted on windshield and dashboard, but also, installed tail and front bumper, the Car DVR has been essential and highly demanded in the market.

Providing the expertise in optics and imaging, DAIWON OPTICAL is currently develops the lenses that optimally designed for Automobile's Camera lenses.



CarDVR adapting DWOPT DVR lens : 25620-3M



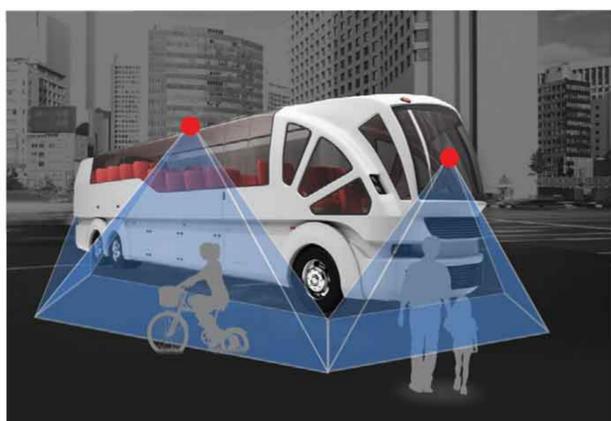
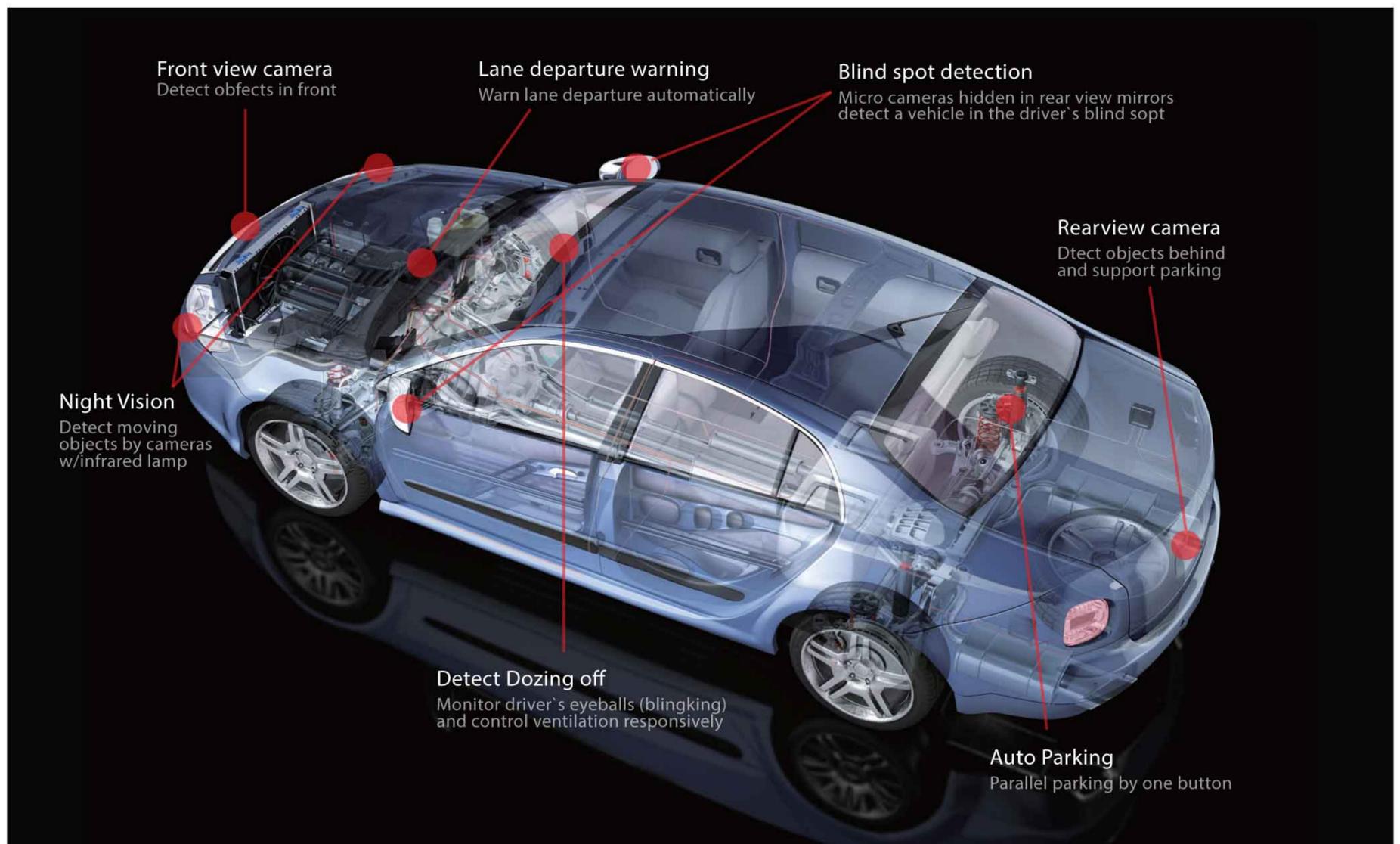
CAMERA LENSES FOR AUTO-VISION

Automotive Vision Technology has been evolved from occupant monitoring to Monitoring other vehicles, safety drive control, intelligent monitoring and beyond.

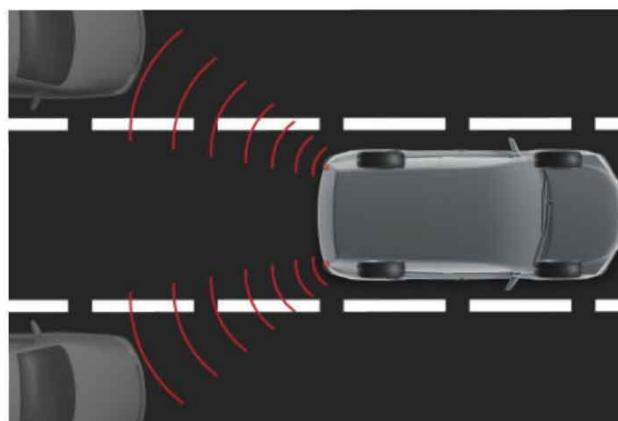
DAIWON OPTICAL as a 2nd or 3rd Tier supplier, has distinctive know-how and experience developing leading-edge automotive vision camera system to market. our team experienced with the project of lens and system development will offer the most optimal Auto-vision starting from concept of design, prototyping, lens manufacturing.

Providing the automotive camera module suppliers the range of lenses for rear view cameras, front-view cameras, surround view cameras, multi-lens array cameras, stereoscopic and most other automotive camera lens that enable to meet the industry's needs for highly required qualification and reliable quality that aligns to the latest technology.

APPLICATION AREA



Multi View Monitoring



Lane Departure Warning System



Driver Status Monitoring

Based on our experience in optical design and all-in-one work in progress, DAIWON OPTICAL is fully equipped with high precision facilities that produce wide-ranging optics that includes Varifocal lenses, CS Mount Varifocal Lenses, and pinhole lenses. Considering customers in need for up-to-date industrial trend, DAIWON OPTICAL holds comprehensive product portfolio with large scale of Fixed/ Varifocal lenses, C-Mount Varifocal Lenses, On-board Varifocal Lenses, On-board CS Mount Varifocal Lenses, and Panfocus Lenses.

TELE/WIDE ANGLE LENS

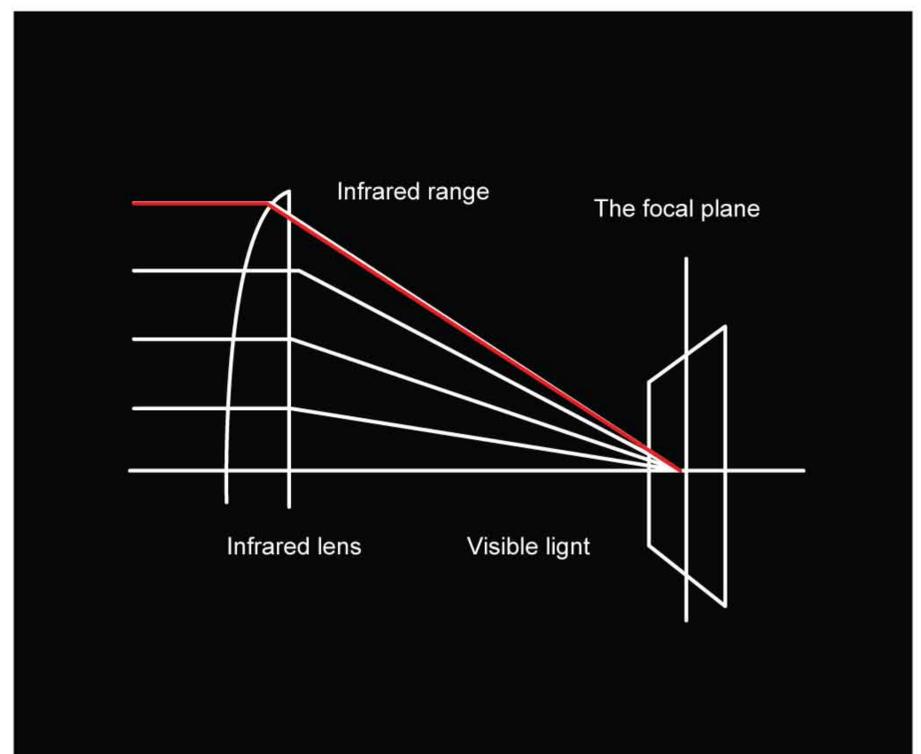
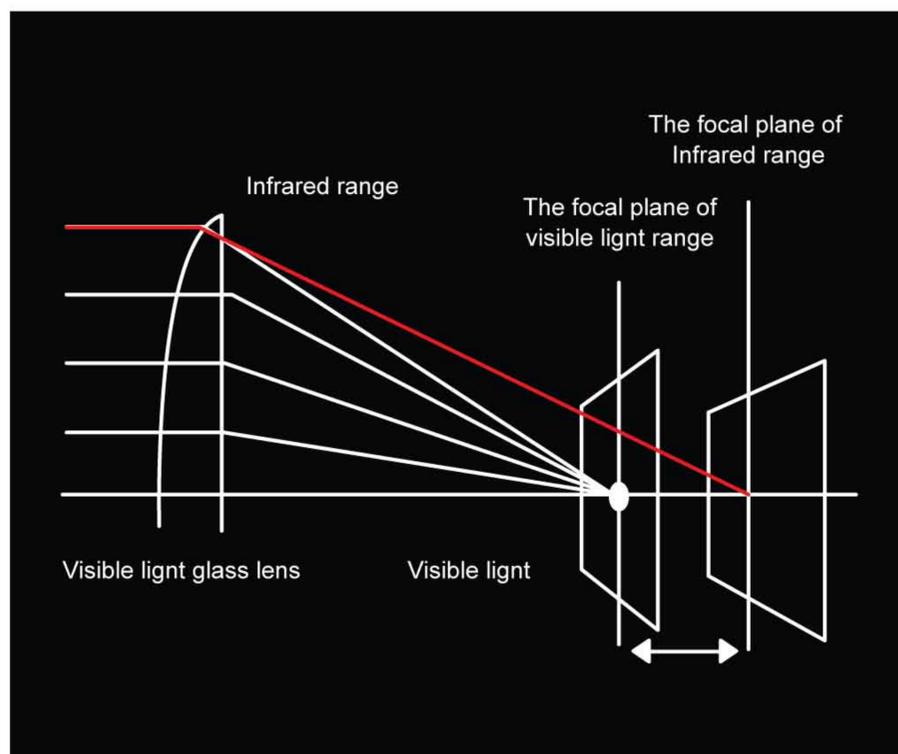
Daiwon Tele/Wide Angle Lenses, with IR shift optimization, facilitates their excellent performance day and night vision in ranges from 2.8~11.0mm and 6.0~50.0mm focal length.

Daiwon's 60500-3MAS hi-magnification lens is designed in compact size with excellence in defining the image in different field of view



IR CCTV LENS PERFORMANCE

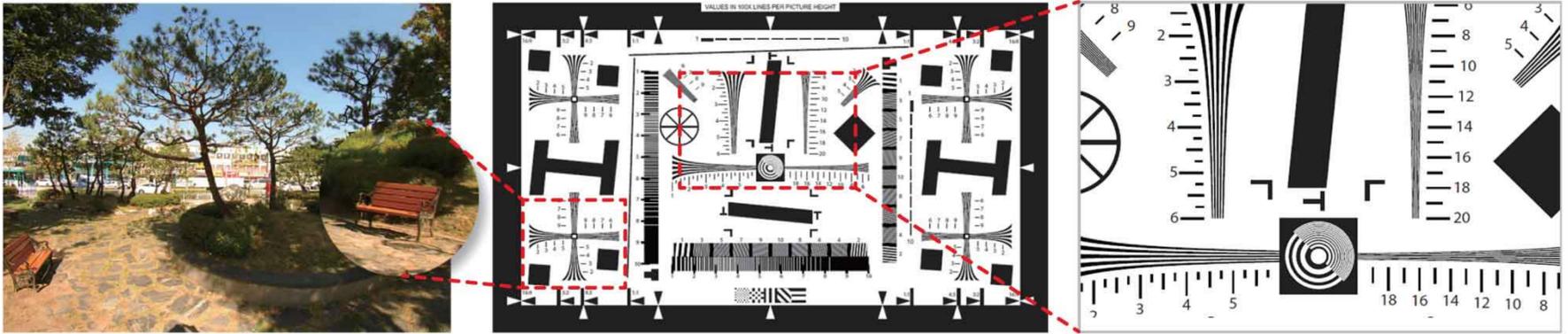
Designed lens to be focused in the same focal plane of visible light range and Infrared wavelength, Daiwon IR CCTV camera lenses are outperformed in day and night vision that prevent from focus shift when using with IR LED. Therefore this can reduce or eliminate a loss of image focus at night or at low light environment.



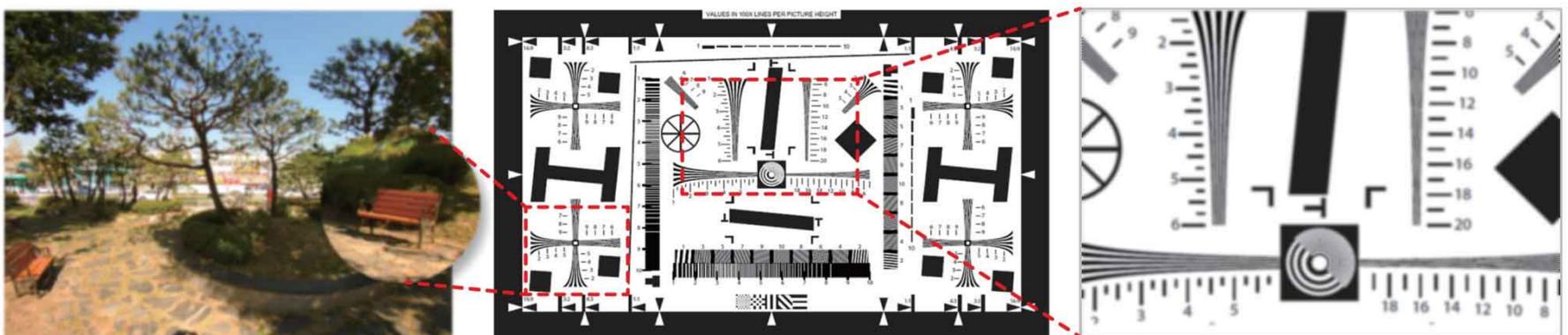
■ IMPORTANCE OF MEGAPIXEL CAMERAS

Proven by the image definition taken by the two different camera lenses, megapixel camera lenses enables to provide higher resolution of images than Non-megapixel camera lenses. With megapixel surveillance camera, the resolutions is at least three times better than an analog camera, with more image detail and with wider coverage than standard resolution cameras.

Measuring Eccentricity by Megapixel lens



Measuring Eccentricity by Non-Megapixel lens



Focal Length	6.0 ~ 50.0 mm
Back Focal Length	5.63 ~ 5.69 mm
Image Format Size	1/2.7", 1/3", 1/4"
Aperture Ratio	F1.6 ~ 360
Iris Operation	Direct Drive
Resolution	3 Mega Pixel
Angle of View (Diagonal)	1/3" 58.5° ~ 7.2° 1/4" 42.2° ~ 5.4°
Dimension(φXL)	29.0 X 50.03 mm
Mount Type	Board Mount, φ14



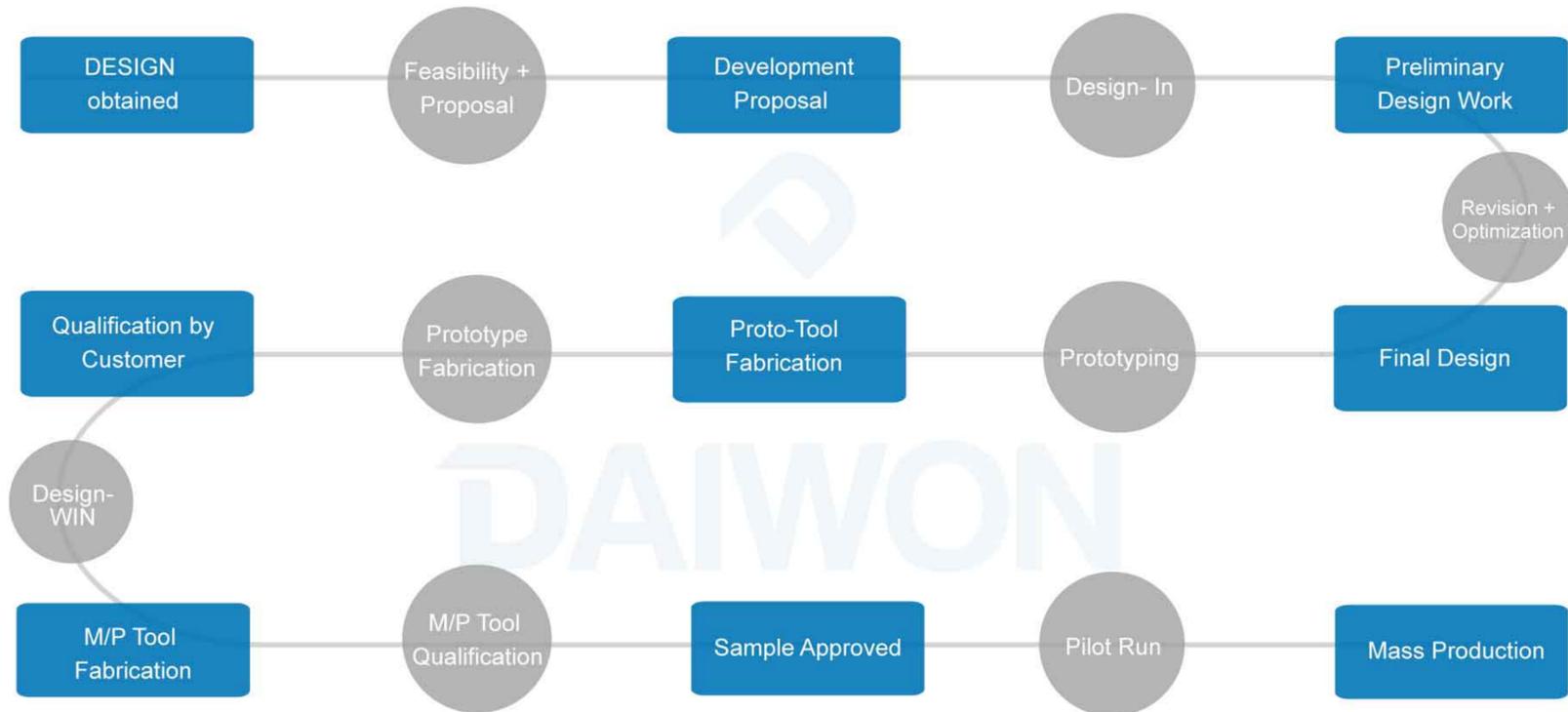
Focal Length	2.8 ~ 11.0 mm
Back Focal Length	3.42 ~ 10.22 mm
Image Format Size	1/2.7", 1/3", 1/4"
Aperture Ratio	F1.4
Iris Operation	Direct Drive
Resolution	3 Mega Pixel
Angle of View (Diagonal)	1/3" 131.8° ~ 38.1° 1/4" 89.3° ~ 28.6°
Dimension(φXL)	29.0 X 44.27 mm
Mount Type	Board Mount, φ14

Our Successful history is measured not only by the off-the-shelf optical solutions but also by our ability to fulfill the designing and developing needs of our customers. We work with customers in various application that require a single unit of a one of a kind part or that require high volumes of their custom parts or anywhere in between. Daiwon employs the latest techniques and state-of-arts equipment to minimize waste and optimize our time to deliver. These savings are passed on the customers by providing the highest quality products at the most economical pricing.

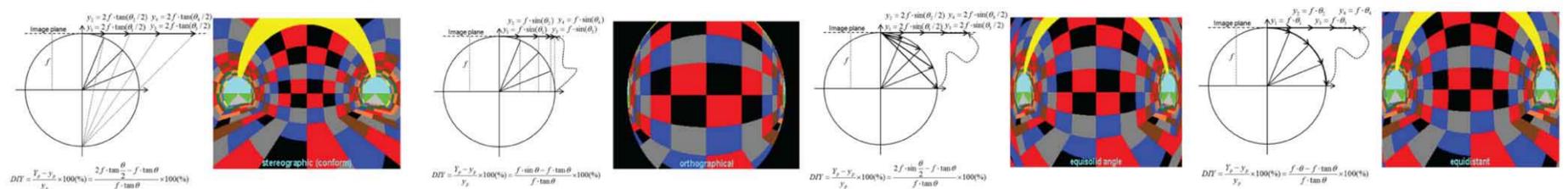
Based on the library of comprehensive optical design we have obtained for your various application, our systemized team-up controlled manufacturing process has realized multiple production and will provide our valued customers with OEM/ODM based customized production.

Our manufacturing capability surpasses most of our competitors' we have monthly capacity of 700,000 units. We invite you to partner in sourcing the existing new technology that we've created. For more information on these cost-effective products, contact us today.

LENS-ON-DEMAND DEVELOPMENT PROCESS



Validation of the Newly Developed Lenses



CERTIFICATION

