

# CCTV

## SECURITY DIVISION



**Hanse**  
Hanse Electronics Co., Ltd.

Hanse Electronics Co., Ltd was established in 1994 with the motto that develops oneself and company it's make the welfare state based on creative and cooperative mind.

We have been concentrating our effort on manufacturing the camera board which is used for the CCTV camera and 4" B/W CRT monitor module.

Especially, we are concentrating on manufacturing and exporting to the world market of B/W, COLOR CAMERA BOARD and 4" FLAT CRT MONITOR MODULE which is used for the industrial CCTV among our products.

And our production facilities ,quality and technical Know-How have been gaining the advantage over any other companies.

From 1999, Hanse has started to manufacture CCTV for the purpose of becoming the industrial and home security expert company.

Finally, we promise that we will do our best to devote as the company which makes outstanding products based on the technical Know-How except the current products.



Underwriters Laboratories Inc.®







## Hanse Electronics Co., Ltd.

1994. 9.	Established
1994.12.	Camera modules (B/W) were developed
1995. 1.	CRT module (B/W) was developed
1995. 3.	Camera Modules (Color) were developed
1996. 6.	Built own factory in Bucheon, Korea
1997. 1.	Moved and expanded factory to Incheon, Korea
1998. 1.	TFT LCD color module was developed
	Home TV camera system was developed
	LCD color observation system was developed
1998. 2.	Appointed prospect export SMPC
1998. 5.	CCTV Camera (B/W, Color ) was developed
1998. 11.	Awarded Export Tower US\$ 5 Millions
1999. 2.	Started manufacturing DIY products
1999. 9.	Approved venture company
2000. 1.	2.4GHz wireless RX/ TX were developed
2000. 2.	2CH 2way Audio Observation System was developed
2000. 3.	Overseas Biz. Team and R&D Team moved to new office in Seoul
2001.11.	Awarded export tower US\$ 10Millions
2002. 6.	Miniature and pipe cameras were developed
2002. 8.	Microscope was developed
2002. 9.	TFT LCD TV/Monitor (5.6", 7") were developed
2002.11.	Organized R&D Institute
2003. 1.	Color Memory Card was developed
2003. 5.	DVR was developed
2004. 9.	TFT LCD Module(4") was developed
2005. 7.	TFT LCD Modules (2.5", 3.5", 4", 5, 5.6", 7") were developed
2006. 7.	2G Flash Memory card(Color) was developed
2006. 12.	Skin & Hair Analysis Digital Camera(x200,x300) was developed
Employees / PI-Capital USD10,000,000 / Y-Turn over USD40,000,000	

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## CCVT CAMERA

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	WATER-PROOF COLOR CAMERA HMC-M210N/P, HMC-M211N/P	06P		DAY & NIGHT INFRARED DOME COLOR CAMERA HTD-100Si, 100SHi	16P		ZOOM CAMERA HCC-Z270N/P	25P
	WATER-PROOF COLOR CAMERA HMC-M300N/P, HMC-M301N/P	07P		DAY & NIGHT INFRARED DOME COLOR CAMERA HTD-130SVi, 130SHVi	16P	<h2>CCTV MONITOR</h2>		
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A stylized graphic in a light blue color on a dark blue background. It features a large, rounded shape on the left that resembles a camera lens or a viewfinder, with a small white vertical rectangle positioned in front of it. To the right of this shape are two arrow-like shapes pointing towards the right, one above and one below the main text area.

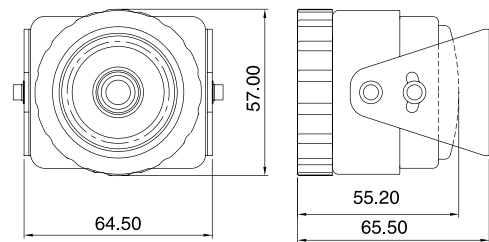
**CCTV CAMERA**

# WATER-PROOF COLOR CAMERA

## HMC-M200N/P, HMC-M201N/P



Super picture Quality 1/4 Inch CCD  
Water-proof Camera  
Easy Installation as DIY  
Built-in AGC, AE, BLC  
High sensitivity  
Reliability lower power consumption  
With 15m extension cable  
Available wide angleview

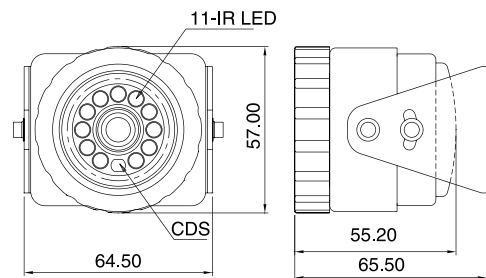


unit : mm

## HMC-M210N/P, HMC-M211N/P



Super picture Quality 1/4 Inch CCD  
Water-proof Camera  
Mirror function  
Easy Installation as DIY  
Auto control of brightness & darkness  
High sensitivity  
Reliability lower power consumption  
With 15m extension cable  
Day & Night function  
Built in 11pcs IR LED  
Available wide angleview



unit : mm

## Specifications

Description	HMC-M200N/P	HMC-M201N/P	HMC-M210N/P	HMC-M211N/P
TV System	NTSC/PAL			
Image sensor	1/4 Inch CCD 270K(320K)	pixel 1/4 Inch CCD 270K(320K) pixel		
Effective pixel	H512 x V491/H512 x V581			
Scanning system	525line 2:1 Interlacing/625line 2:1 Interlacing			
Sync. System	Internal			
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)			
Horizontal resolution	330 TV lines(Center)		330 TV lines(Center)	
Video output	1.0Vp-p,75ohm			
S/N ratio	48dB above(AGC OFF)			
Gamma( $\gamma$ )	$\gamma=0.45$			
IR LED	—	11 unit Infrared LED, 850nm		—
AGC	ON			
IRIS	Electrical Auto Iris			
Shutter speed	1/60(50) ~ 1/100,000 sec			
Min. Illumination	0.5lx / F=1.2 (AGC ON) 0.5lx / F=1.2 (AGC ON)			
Lens	f=3.6mm, F2.0			
White balance	ATW			
Power Consumption	DC 12V±1V / 130mA Max	DC 12V±1V / 130mA Max		
Operating Temp.	-10℃~60℃			
Dimensions(mm)	64.5(W) x 57(H) x 65.5(D)			
Housing material	Zinc			

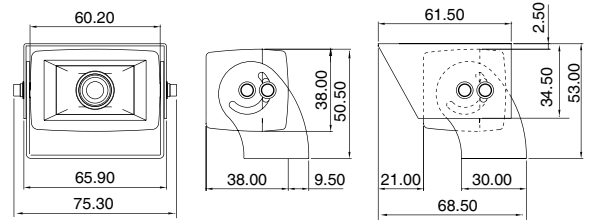
The product may include option or additional functions.

# WATER-PROOF COLOR CAMERA

## HMC-M300N/P, HMC-M301N/P



Super picture Quality 1/4 Inch CCD  
Water-proof Camera  
Easy Installation as DIY  
Built-in AGC, AE, BLC  
High sensitivity  
Reliability lower power consumption  
With 15m extension cable  
Available wide angleview

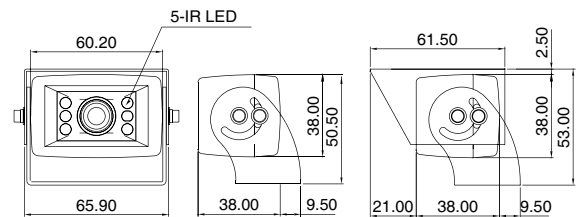


unit : mm

## HMC-M310N/P, HMC-M311N/P



Super picture Quality 1/4 Inch CCD  
Water-proof Camera  
Mirror function  
Easy Installation as DIY  
Auto control of brightness & darkness  
High sensitivity  
Reliability lower power consumption  
With 15m extension cable  
Day & Night function  
Built in 5pcs IR LED  
DC 12V adaptor  
Available wide angleview



unit : mm

## Specifications

Description	HMC-M300N/P	HMC-M301N/P	HMC-M310N/P	HMC-M311N/P
TV System	NTSC/PAL			
Image sensor	1/4 Inch CCD 270K(320K) pixel			
Effective pixel	H512 x V491/H512 x V581			
Scanning system	525line 2:1 Interlacing/625line 2:1 Interlacing			
Sync. System	Internal			
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)			
Horizontal resolution	330 TV lines(Center)			
Video output	1.0Vp-p, 75ohm			
S/N ratio	45dB above(AGC OFF)			
Gamma( $\gamma$ )	$\gamma$ =0.45			
IR LED	—	5 unit Infrared LED, 850nm	—	5 unit Infrared LED, 850nm
AGC	ON			
IRIS	Electrical Auto Iris			
Shutter speed	1/60(50) ~ 1/100,000 sec			
Min. Illumination	0.5lx/F=1.2(AGC ON)		0.5lx/F=1.4(AGC ON)	
Lens	f=3.6mm, F2.0 or Option			
White balance	ATW			
Power Consumption	DC 12V10%/ 100mA Max	DC 12V±10%/ 130mA Max	DC 12V±10%/ 100mA Max	DC 12V±10% / 130mA Max
Operating Temp.	-10℃~60℃			
Dimensions(mm)	75.3(W) x 53(H) x 68.5(D)			
Housing material	Zinc			

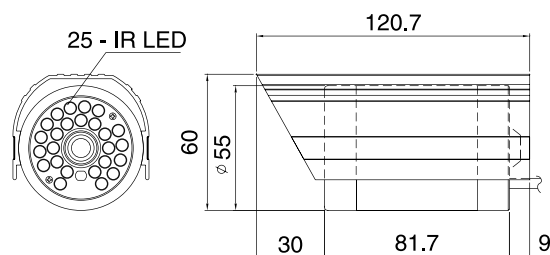
The product may include option or additional functions.

# DAY & NIGHT INFRARED ILLUMINATOR COLOR CAMERA

## HCC-IR226N/P



1/4 CCD  
High resolution over 330TV Lines  
Back Light compensation  
High resolution:Vivid Sharp Picture  
Indoor 9m/Outdoor 7m  
25 units Infrared LED  
Rain proof  
Damper proof

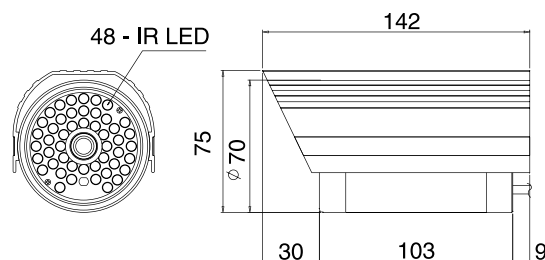


unit : mm

## HCC-IR227N/P



1/3inchCCD  
High resolution over Horizontal 480TV Lines  
Back Light compensation  
High resolution:Vivid Sharp Picture  
Indoor 15m/Outdoor 12m  
48 units Infrared LED  
Rain proof  
Damper proof



unit : mm

## Specifications

Description	HCC-IR226N/P	HCC-IR227N/P
TV System	NTSC/ PAL	
Image sensor	1/4 Inch CCD 270K(320K) pixel	1/3 Inch CCD 410K(470K) pixel
Scanning system	525line 2:1 Interlacing/625line 2:1 Interlacing	
Effective pixel	512(H) x 491(V)/512(H) x 581(V)	771(H) x 492(V)/737(H) x 575(V)
Sync System	Internal	
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)	
Min. illumination	0.5lx / F=1.2(AGC ON) / 0.00 lx(IR LED ON)	
LENS & View Angle	f=3.6mm/92° or Option	f=3.6mm/92° or Option
Resolution	330 TV Lines(Center)	480 TV Lines(Center)
S/N Ratio	48dB Min. (AGC OFF)	
White balance	ATW	
Iris	ESC	
Electronic Shutter	1/60(1/50)~1/100,000sec.	
Video Output	1.0Vp-p/ 75ohm	
Gamma(γ)	γ=0.45	
IR LED	25 unit Infrared LED, 850nm	48 unit Infrared LED, 850nm
Beam Spread	60°	
Distance	Indoor 9m / Outdoor 7m	Indoor 15m / Outdoor 12m
Mirror Function	Optional	
AGC	ON	
Operation Temperature	-10℃~60℃	
Water Resistance	IP55 / NEMA4	
Operational humidity	Within 90% RH	
Dimensions(mm)	ø 60 x 120.7	ø 75 x 142
Power Consumption	DC12V±10% / 250mA	DC12V±10% / 330mA
Housing material	Aluminum	

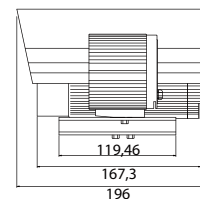
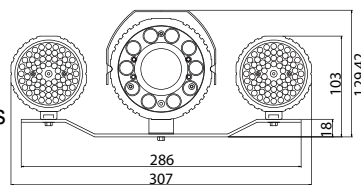
The product may include option or additional functions.

# DAY & NIGHT INFRARED ZOOM ILLUMINATOR COLOR CAMERA

## HIR-400ZL



Built in IR Cut Filter Removable, 6-60mm  
3Motors Zoom Lens (Option)  
Clear Color Picture In Day Time And Automati  
cally Changed To B/W Picture At Night Time  
Completely Free From Foreign Body Outdoors  
During The Night On Front Glass (Patented)  
Separate Control Board For Infrared LED  
Prolongs The Life Span Of LEDs  
Built-In Cooling Fan and Heating System  
Input Power is DC 12V and AC 24V (Option)

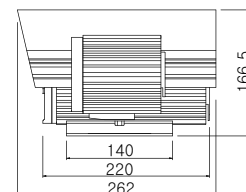
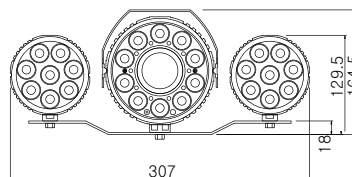


unit : mm

## HIR-500ZL



Built in IR Cut Filter Removable, 6.0-96mm  
3Motors Zoom Lens  
Clear Color Picture In Day Time And  
Automatically Changed To B/W Picture At  
Night Time  
Completely Free From Foreign Body  
Outdoors During The Night On Front Glass (Patented)  
Separate Control Board For Infrared LED  
Prolongs The Life Span Of LEDs  
Input Power is DC 12V and AC 24V (Option)



unit : mm

## Specifications

Model	HIR-400ZL	HIR-400Z	Model	HIR-500ZL	HIR-500Z
Image Device	1/3" Super HAD Sony CCD		Image Device	1/3" Super HAD Sony CCD	
Horizontal Resolution	480TV Line or 550 TV Line(Optional)		Horizontal Resolution	480TV Line or 550 TV Line(Optional)	
Minimun Illumination	0.3Lux in day time 0.0Lux in night time		Minimun Illumination	0.3Lux in day time 0.0Lux in night time	
Lens Mount	6.0-96MM Motorized zoom Lens (3 motors)		Lens Mount	6.0-96MM Motorized zoom Lens (3 motors)	
Power Consumption	2450mA	1450mA	Power Consumption	3200mA	2000mA
Number of LED	Nomal 144EA, Hybrid Chip 10EA	Hybrid Chip 10EA	Number of LED	Hybrid Chip 26EA	Hybrid Chip 10EA
Weight	Approx. 2.55Kg	Approx. 1.8Kg	Weight	Approx. 5.4Kg	Approx. 3.3Kg
Illuminator distance	150M Max		Illuminator distance	250M Max	200M Max

The product may include option or additional functions.



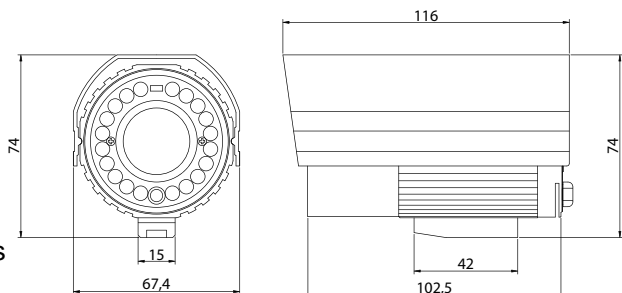
# DAY & NIGHT INFRARED ILLUMINATOR COLOR CAMERA

## HIR-020V



Clear Color Picture In Day Time And Automatically Changed To B/W Picture At Night Time  
Built-In 4-9 MM Vari-Focal Lens  
Built -In 20 IR LEDs For More Effective Illumination  
Separate Control Board For Infrared LED Prolongs The Life Span Of LEDs  
Optimum Circuit Board Design To Suppress The Heat From Infrared LEDs

Illuminator Distance : 25 M (In-Door)

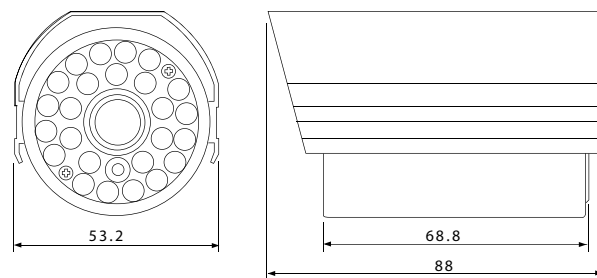


unit : mm

## HIR-025S



Clear Color Picture In Day Time And Automatically Changed To B/W Picture At Night Time  
Built -In 25 IR LEDs For More Effective Illumination  
Separate Control Board For Infrared LED Prolongs The Life Span Of LEDs  
Optimum Circuit Board Design To Suppress The Heat From Infrared LEDs  
Weather-Proof Housing  
Illuminator Distance : 15 M (In-Door) 5 M (Out-Door)  
Recommend In-Door Use



unit : mm

## Specifications

Model	HIR-020SV	HIR-020SHV	Model	HIR-025S
Image Device	1/3" Super HAD Sony CCD		Image Device	1/3" Super HAD Sony CCD
Horizontal Resolution	330TV Line	480TV Line	Horizontal Resolution	330TV Line
Minimum Illumination	0.3Lux in day time		Minimum Illumination	0.3Lux in day time
	0.0Lux in night time			0.0Lux in night time
Lens Mount	4-9mm Vari-Focal Lens		Lens Mount	4mm Vari-Focal Lens
Power Consumption	600mA		Power Consumption	380mA
Weight	Approx. 420g		Weight	Approx. 250g

The product may include option or additional functions.

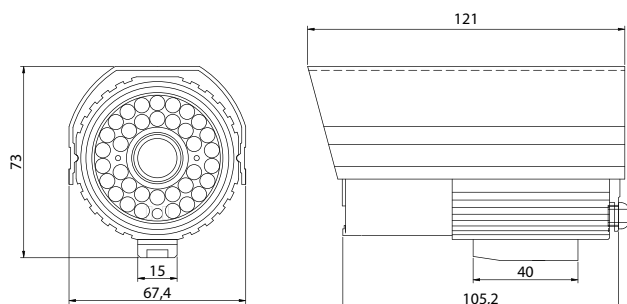


# DAY & NIGHT INFRARED ILLUMINATOR COLOR CAMERA

## HIR-040W



550TV Lines HQ Camera (Option)  
 Clear Color Picture In Day Time And  
 Automatically Changed To B/W Picture At  
 Night Time  
 Special Design To Prevent Blurred Picture  
 When Having Particles On Glass  
 6mm Board Type Lens On The Request  
 40 PCS Of 850nm Infrared LEDs  
 Separate Control Board For Infrared LED  
 Prolongs The Life Span Of LEDs  
 Built-In Cooling Fan (Option)

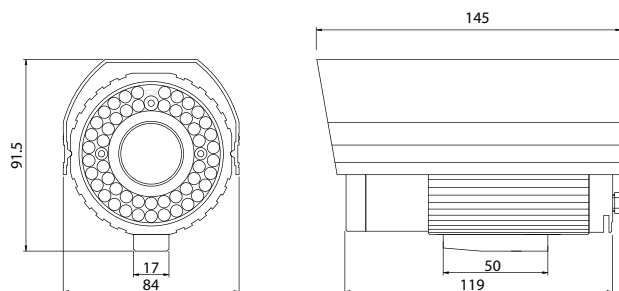


unit : mm

## HIR-050W



550TV Lines HQ Camera (Option)  
 Clear Color Picture In Day Time And  
 Automatically Changed to B/W Picture At Night Time  
 Special Design to prevent Blurred Picture  
 When Having Particles On Glass  
 Built -In 50 IR LEDs For More Effective Illumination  
 Separate Control Board For Infrared LED  
 Prolongs The Life Span Of LEDs  
 Optimum Circuit Board Design To Suppress  
 The Heat From Infrared LEDs



unit : mm

## Specifications

Model	HIR-040SW	HIR-040SHW	Model	HIR-050SHWV	HIR-050SW
Image Device	1/3" Super HAD Sony CCD		Image Device	1/3" Super HAD Sony CCD	
Horizontal Resolution	330TV Line	480TV Line	Horizontal Resolution	480TV Line	330TV Line
Minimum Illumination	0.3Lux in day time 0.0Lux in night time		Minimum Illumination	0.3Lux in day time 0.0Lux in night time	
Lens Mount	4, 6, 8, 12mm Vari-Focal Lens		Lens Mount	6, 8, 12mm C/CS Mount Lens	
Power Consumption	600mA		Power Consumption	870mA	
Weight	Approx. 580g		Weight	Approx. 870g	

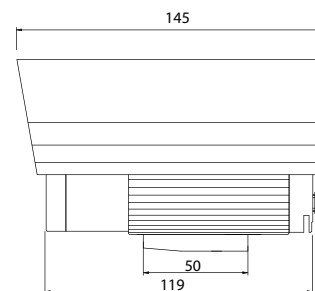
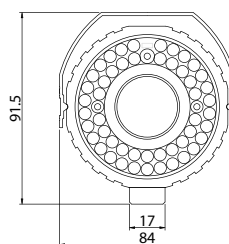
The product may include option or additional functions.

# DAY & NIGHT INFRARED ILLUMINATOR COLOR CAMERA

## HIR-050V



550TV Line HQ Camera (Option)  
Clear Color Picture In Day Time And Automatically Changed To B/W Picture At Night Time  
Special Design To Prevent Blurred Picture When Having Particles On Glass  
Built -In 50 IR LEDs For More Effective Illumination  
Separate Control Board For Infrared LED  
Prolongs The Life Span Of LEDs  
Optimum Circuit Board Design To Suppress The Heat From Infrared LEDs

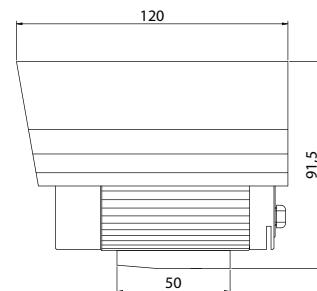
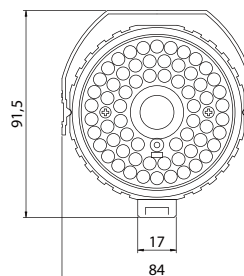


unit : mm

## HIR-064W



550TV Line HQ Camera (Option)  
Clear Color Picture In Day Time And Automatically Changed To B/W Picture At Night Time  
Special Design To Prevent Blurred Picture When Having Particles On Glass  
Built -In 64 IR LEDs For More Effective Illumination  
Separate Control Board For Infrared LED  
Prolongs The Life Span Of LEDs  
Optimum Circuit Board Design To Suppress The Heat From Infrared LEDs



unit : mm

## Specifications

Model	HIR-050SHVW	HIR-050SVW	Model	HIR-064SW	HIR-064SHW
Image Device	1/3" Super HAD Sony CCD		Image Device	1/3" Super HAD Sony CCD	
Horizontal Resolution	480TV Line	330TV Line	Horizontal Resolution	330TV Line	480TV Line
Minimun Illumination	0.3Lux in day time 0.0Lux in night time		Minimun Illumination	0.3Lux in day time 0.0Lux in night time	
Lens Mount	4 - 9mm C/CS Mount Lens		Lens Mount	44, 6, 8, 12mm Board Lens	
Power Consumption	870mA		Power Consumption	600mA	
Weight	Approx. 890g		Weight	Approx. 590g	

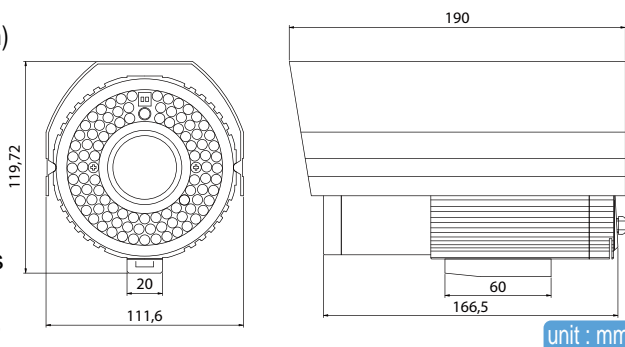
The product may include option or additional functions.

# DAY & NIGHT INFRARED ILLUMINATOR COLOR CAMERA

## HIR-090W



Built in 5-50mm Vari-focal IRIS IR Lens (Option)  
 Clear Color Picture In Day Time And  
 Automatically Changed To B/W  
 Picture At Night Time  
 Completely Free From Foreign Body  
 Outdoors During The Night On Front  
 Glass (Patented)  
 96EA/120EA Of 850nm Infrared LEDs  
 Separate Control Board For Infrared  
 LED Prolongs The Life Span Of LEDs  
 Illuminates Only When It Is Dark  
 Thanks To The Built-In CDS Sensor

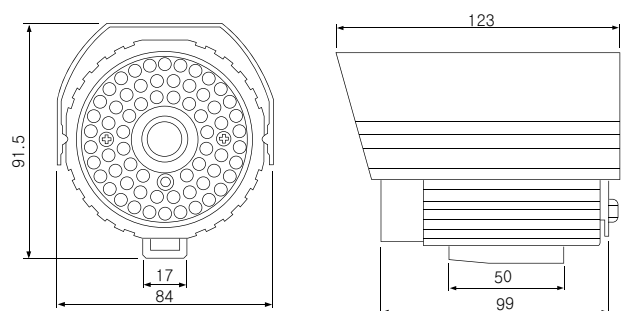


unit : mm

## HIR-120W



550TV Line HQ Camera (Option)  
 Clear Color Picture In Day Time And  
 Automatically Changed To B/W Picture At  
 Night Time  
 Special Design To Prevent Blurred Picture  
 When Having Particles On Glass  
 Built -In 120 IR LEDs For More Effective  
 Illumination  
 Separate Control Board For Infrared LED  
 Prolongs The Life Span Of LEDs



unit : mm

## Specifications

Model	HIR-090ZA	HIR-090SHVW	Model	HIR-120SW	HIR-120SHW
Image Device	1/4" Super HAD Sony CCD	1/3" Super HAD Sony CCD	Image Device	1/3" Super HAD Sony CCD	
Horizontal Resolution	480TV Line	480TV Line	Horizontal Resolution	330TV Line	480TV Line
Minimun Illumination	0.3Lux in day time	0.3Lux in day time	Minimun Illumination	0.3Lux in day time	
	0.0Lux in night time	0.0Lux in night time		0.0Lux in night time	
Lens Mount	26x Optical Zoom	5-50mm Vari-	Lens Mount	4, 6, 8, 12mm Board Lens	
	Auto Focus	Focal Lens	Power Consumption	1260mA	
Power Consumption	1450mA	1260mA	Weight	Approx. 1.0Kg	
Weight	Approx. 2.5Kg	Approx. 1.6Kg			

Model	HIR-090SHW	HIR-090SW
Image Device	1/3" Super HAD Sony CCD	
Horizontal Resolution	480TV Line	330TV Line
Minimun Illumination	0.3Lux in day time	
	0.0Lux in night time	
Lens Mount	8, 12, 16mm CS Mount Lens (Oprion)	
Power Consumption	1260mA	
Weight	Approx. 1.6Kg	Approx. 1.5Kg

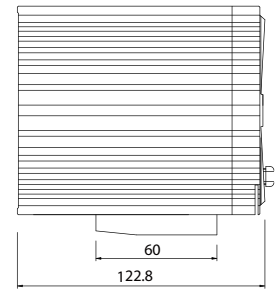
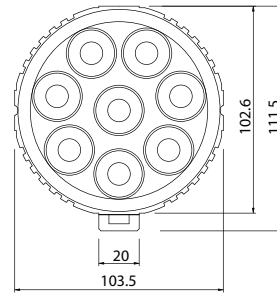
The product may include option or additional functions.

# DAY & NIGHT INFRARED ILLUMINATOR

## HIL-150



8 EA of 850nm Hybrid Chip Infrared LEDs  
Seperate Control Board for Infrared LED Prolongs the life Span of LEDs  
Optimum Circuit Board Design to suppress the Heat from Infrared LEDs  
Built-in Cooling Fan to control the heat from Infrared LEDs  
Illuminate Distance : Out-Door 150 M Max.

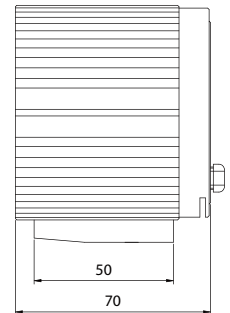
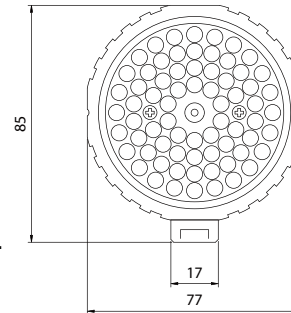


unit : mm

## HIL-072



144/72 EA of 850nm Infrared LEDs  
Seperate Control Board for Infrared LED Prolongs the life Span of LEDs  
Optimum Circuit Board Design to suppress the Heat from Infrared LEDs  
Built-in Cooling Fan to control the heat from Infrared LEDs  
Illuminate Distance : Out-Door 60 M / 35 M Max.



unit : mm

## Specifications

Model	HIL-150	Model	HIL-072
Number of Infrared LED	Hybrid Chip LED 8EA	Number of Infrared LED	72 Pieces
Wave Length	850nm	Wave Length	850nm
Angle of Infrared LED	10°	Angle of Infrared LED	10° and 30° Combinations
Illuminate Distance	Out-door 150m (Max)	Illuminate Distance	Out-door 35m (Max)
Power Supply	DC 12V	Power Supply	DC 12V
Power Consumption	1000mA	Power Consumption	1000mA
Operating Temperature	-15℃~60℃(23°F~140°F)	Weight	Approx. 750g
Weight	Approx. 750g		

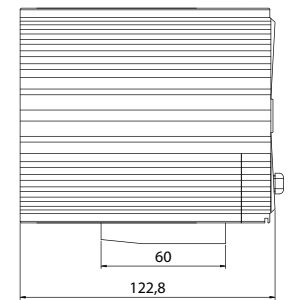
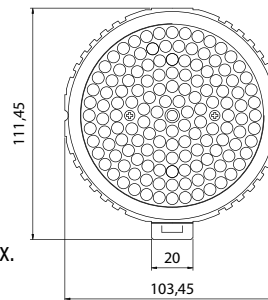
The product may include option or additional functions.

# DAY & NIGHT INFRARED ILLUMINATOR

## HIL-130



144/72 EA of 850nm Infrared LEDs  
Seperate Control Board for Infrared LED  
Prolongs the life Span of LEDs  
Optimum Circult Board Design to suppress  
the Heat from Infrared LEDs  
Built-in Cooling Fan to control the heat from  
Infrared LEDs  
Illuminate Distance : Out-Door 60 M / 35 M Max.



unit : mm

## Specifications

Model	HIL-130
Number of Infrared LED	140 Pieces
Wave Length	850nm
Angle of Infrared LED	10° and 30° Combinations
Illuminate Distance	Out-door 60m (Max)
Power Supply	DC 12V
Power Consumption	1400mA
Weight	Approx. 1.05Kg

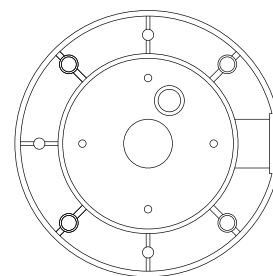
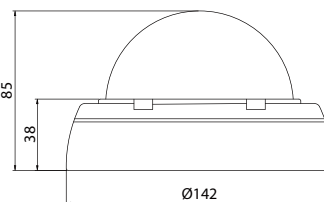
The product may include option or additional functions.

# DAY & NIGHT INFRARED DOME COLOR CAMERA

## HTD-100i



Clear Color Picture In Day Time And Automatically Changed To B/W Picture At Night Time  
Built-In 4-9 MM Vari-Focal Lens (Option)  
Built-In 40 / 30 IR LEDs For More Effective Illumination  
Separate Control Board For Infrared LED Prolongs The Life Span Of LEDs  
Optimum Circuit Board Design To Suppress The Heat From Infrared LEDs  
Indoor Use Only  
Illuminator Distance : 30 M (In-Door)

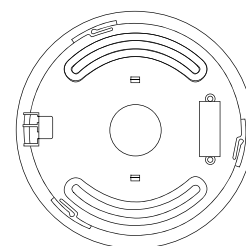
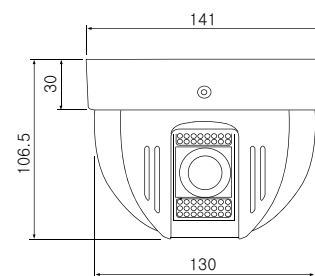


unit : mm

## HTD-130i



Clear Color Picture In Day Time And Automatically Changed To B/W Picture At Night Time  
Built-In 4-9 MM Vari-Focal Lens (Option)  
Built-In 40 / 30 IR LEDs For More Effective Illumination  
Separate Control Board For Infrared LED Prolongs The Life Span Of LEDs  
Optimum Circuit Board Design To Suppress The Heat From Infrared LEDs  
Indoor Use Only  
Illuminator Distance : 30 M (In-Door)



unit : mm

## Specifications

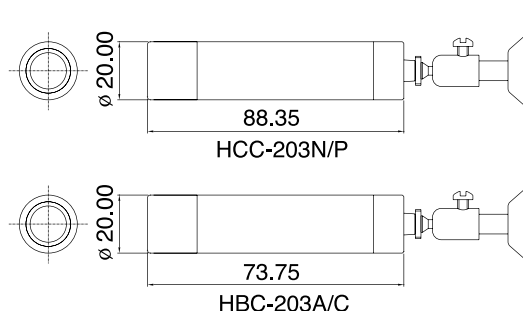
Model	HTD-130SVi	HTD-100Si	HTD-130SHVi	HTD-100SHi
Image Device	1/3" Super HAD Sony CCD			
Horizontal Resolution	330TV Line		480TV Line	
Minimun Illumination	1.0Lux in day time			
	0.0Lux in night time			
Lens Mount	4, 9mm Vari-Focal	4, 6, 8, 12mm Board Lens	4, 9mm Vari-Focal	4, 6, 8, 12mm Board Lens
Power Consumption	600mA		450mA	
Weight	Approx. 310g	Approx. 280g	Approx. 310g	Approx. 280g
The product may include option or additional functions.				

# BULLET CAMERA

## HCC-203N/P, HCC-230A/C



Low Power Consumption  
Low Cost  
High quality picture  
High sensitivity  
Compact size

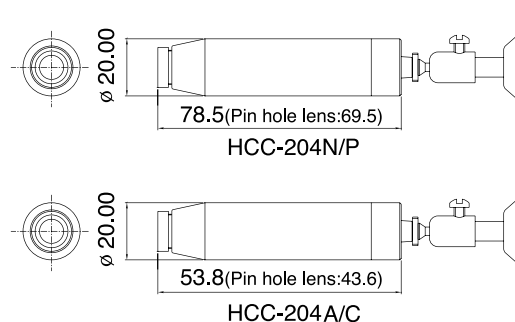


unit : mm

## HCC-204N/P, HCC-204A/C



Low Cost  
Compact size  
High quality picture  
High sensitivity



unit : mm

## Specifications

DDescription	HCC-203N/P, 204N/P, P204N/P	HBC-203A/C, 204A/C, P204A/C
TV System	NTSC/PAL	
Image sensor	1/4inch CCD 270K(320K) pixels 1/3inch, 270K(320)pixels	
Effective pixel	H512 x V491/H512 x V581	
Scanning	525line 2:1 interlacing/625line 2:1 interlacing	
Synchronize	Internal	
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)	
Vertical resolution	330TV line(Center)	380TV line(Center)
Video Output	1.0Vp-p/75ohm	
S/N ratio	50dB Min. ( AGC OFF)	
Min. Illumination	0.5lx/ f=1.4,(AGC ON)	0.1lx/ f=1.4,(AGC ON)
Gamma( $\gamma$ )	$\gamma = 0.45$	
AGC	ON.	
White balance	Auto control	—
Electronic Shutter	1/60(1/50)~1/100,000 sec.	
Lens	f=4.3 F 2.0 or f=3.6 F 2.0	
Audio out power	0.36W	
Audio Impedance	600ohm	
Power Consumption	DC12V $\pm$ 10%/Max. 100mA	DC12V $\pm$ 10%/Max. 120mA
Ambient Conditions	-10℃~60℃	
Housing material	Aluminum	

The product may include option or additional functions.

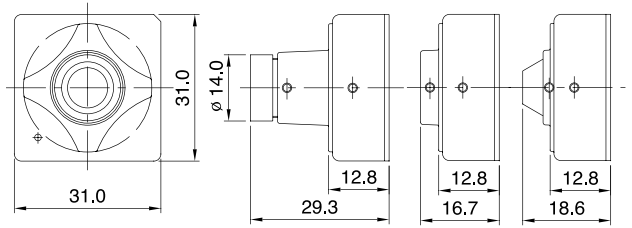


# MINIATURE CAMERA & C-MOS COLOR CAMERA

## HCC-207N/P, HBC-207A/C



270,000(N), 320,000(P) Pixel CCTV  
Color Camera  
Built-in Automatic function- AGC (Auto  
Gain Control), ATW (Auto Tracing White  
Balance), E-S (Electronic Shutter)  
Apply DSP (Digital Signal Processor)  
Economic Power consumption  
Built-in Audio function



unit : mm

## HSC-CM204N/P (C-MOS CAMERA)



Exposure, Gain, White Balance,  
Built in BLC It realized the highest  
image.

### Specifications

Description	HCC-207N/P	HBC-207A/C	Description	HSC-CM204N/P
TV System	NTSC/PAL	EIA/CCIR	TV System	NTSC/ PAL
Image sensor	1/4 Inch CCD 270K(320K) pixel	1/3 Inch CCD 270K(320K)	Image sensor	1/3inch, CMOS Image Sensor 318Kpixel
Effective pixel	510(H) x 492(V)/512(H) x 582(V)		Scanning system	525 Lines 2:1 interlacing
Scanning system	525line 2:1 Interlacing/625line 2:1 Interlacing			625 Lines 2:1 interlacing
Sync. System	Internal		Sync. System	Internal Sync.
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)		Resolution	250 TV Line(min), 300TV Line(min)
Horizontal resolution	330 TV lines(Center)	380 TV lines(Center)	Shutter speed	1/60(1/50)~1/15,000sec.
Video output	1.0V p-p / 75ohm		White balance	Auto control
S/N ratio	48dB Max(AGC OFF)	50dB Max (AGC OFF)	AGC	ON
Gamma(γ)	γ=0.45		Sensitivity Boost	+18dB (AGC ON)
IRIS	ESC	ESC	S/N ratio	48dB above(AGC OFF)
Min. Illumination	0.5lx / F=1.4(AGC ON)	0.1lx / F=1.4(AGC ON)	Min. Illumination	3lx (F1.4)
Lens	f=4.3mm, f=3.6mm or Option	f=3.6mm 92° or Option	Video output	1.0Vp-p.75ohm
AGC	ON		Aodio out power	0.36W
White balance	Automatic white balance control	—	Aodio Impedance	600Ω
Shutter speed	1/60(1/50)~1/100,000		Power Consumption	DC5V ± 10%, Max 80mA
Power Consumption	DC 12V ± 1V / 150mA Max	DC 9~12V / 120mA Max	Operating Temp.	0℃ ~ 40℃
Audio Out Power	0.36W		Housing material	Aluminum
Audio Impedance	600ohm			
Operating Temp.	-10℃~60℃			
Housing material	Zinc			

The product may include option or additional functions.

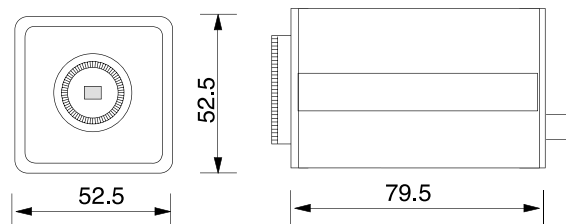


# COLOR CCD CAMERA

## HCC-14N/P



Realization of High quality picture and Natural color.  
Automatic and Super High Speed Electronic Shutter Control  
The various built-in automatic control functions

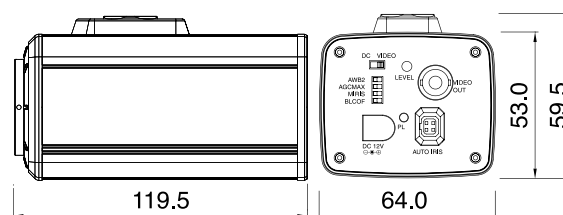


unit : mm

## HCC-475N/P



Super picture Quality 1/3 Inch CCD  
Realization of High quality picture and Natural color.  
Automatic and Super High Speed Electronic Shutter Control  
The various built-in automatic control functions



unit : mm

## Specifications

Description	HCC-14N/P	HCC-475N/P
TV System	NTSC/PAL	NTSC/PAL
Image sensor	1/4inch CCD 270K(320K) pixels	1/3 Inch CCD 410K(470K) pixel
Effective pixel	H512 x V492,/ H500 x V582	H768 x 494,/ H752 x V582
Scanning system	525 Line 2:1 interface/ 625 Line 2:1 interface	
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)	
Sync. System	Internal	Internal
Horizontal resolution	330TV Lines(Center)	480TV Lines(Center)
Min. Illumination	0.5lx / F=1.4(AGC ON)	0.5lx / F=1.4(AGC ON)
S/N ratio	48dB (AGC OFF)	48dB (AGC OFF)
Gamma(γ)	γ = 0.45	γ =0.45
Video output signal	—	1.0Vp-p, 75ohm
White balance	AUTO	Automatic White balance control
AGC	ON	ON/OFF
BLC	BUilt-in	ON/OFF
Iris	Electronic Iris	Video DRV/ DC DRV Auto iris lens, ESC
Shutter speed	1/60(1/50)~1/100,000sec	1/60(1/50)~1/100,000sec.
Video Output	1.0V p-p/75ohm	1.0V p-p, 75ohm
Power Consumption	DC 12V ± 10%, 160mA Max	DC12V ± 10%, 130mA
Operating Temp.	-10℃~60℃	-10℃~60℃
Dimensions(mm)	52.5(W) x 52.5(H) x 82.3(D)	64(W) x 59.5(H) x119.5(D)
Housing material	Aluminum	Aluminum

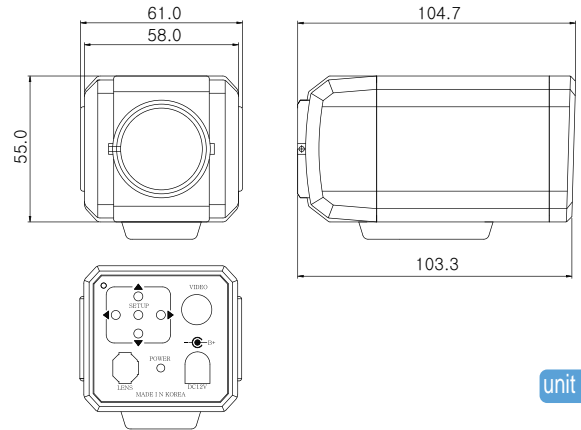
The product may include option or additional functions.

# WDR COLOR CAMERA

## HCC-540FN/P



Pixim 1/3" DPS ORCA chip Sensor  
High Resolution (up to 540HTVL Equivalent)  
Best WDR (Wide Dynamic Range) Function  
Digital Day & Night. 4X Digital Zoom,  
4 Privacy zone. Motion Detection Function  
Built-in OSD(On Screen Display) Menu  
C/CS Mount



unit : mm

## Specifications

MODEL	HCC-540FN	HCC-540FP
Signal system	NTSC	PAL
Image Sensor	1/3" Interline Transfer Type Sony CCD	
Total Pixels	811(H)X508(V)	795(H)X596(V)
Effective Pixels	768(H)X494(V)	752(H)X582(V)
Resolution	More than 540 TV lines	
Scanning Frequency	15.734KHz(H), 60(V)	15.625KHz(H), 50(V)
Shutter Speed	1/60~1/100,000 sec	1/50~1/100,000 sec
Min. Illumination	0.002 Lux @F1.2	
Day & Night	D&N Function by Digital Change : Auto/Off	
Shutter	ESL / Manual / Flickerless	
White Balance	ATW / AWC / MANUAL	
BLC	Low / Middle / High / Off	
AGC	Low / Middle / High / Off	
DNR	Auto / Off	
Privacy Zone & Motion Detection	4 Programmable Zone	
Sharpness	On( level : 0 ~ 31) / Off	
Camera ID	On / Off	
S/N Ratio	More than 50dB	
Video Output	Composite video output 75 ohm terminated	
Len Mount	C / CS Mount	
Sync. System	Internal	
Operating Humidity	30 % ~ 90 % RH	
Operating Temp.	- 10℃ to 50℃	
Dimension	61(W) x 55(H) x 104.7(D)mm	
Weight	About 420g	
Power Consumption	Max 2.5W	
Power Supply	DC 12 V(10.2V~14.5 V)	

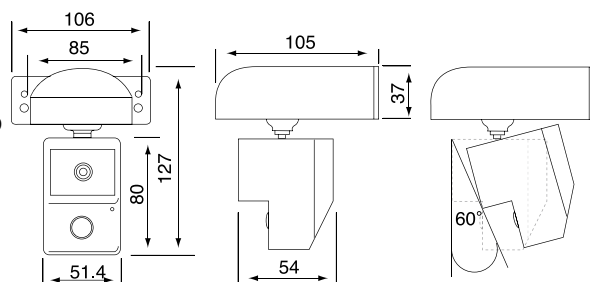
The product may include option or additional functions.

# PIR SENSOR CAMERA & COLOR CCD CAMERA

## HTC-300N/P



Super picture Quality  
Easy Installation as DIY  
Built-in AGC  
High resolution camera unit with audio  
Reliability lower power consumption  
Built in PIR sensor

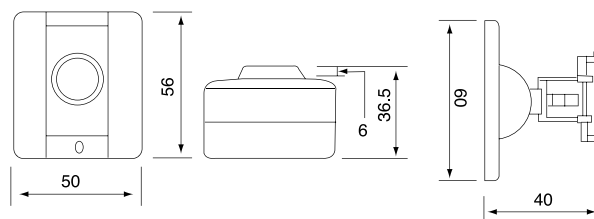


unit : mm

## HMC-M100N/P



Super picture Quality 1/4 Inch CCD  
Easy Installation as DIY  
Built-in AGC  
High sensitivity  
Reliability lower power consumption



unit : mm

## Specifications

Description	HMC-M300N/P	HMC-M100N/P
TV System	NTSC/PAL	
Image sensor	1/4 Inch CCD 270K(320K)	
Effective pixel	H510 x V492/H512 x V582	
Scanning system	525line 2:1 Interlacing/625line 2:1 Interlacing	
Sync. System	Internal	
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)	
Horizontal resolution	330 TV lines(Center)	
Video output	1.0Vp-p,75ohm	
S/N ratio	48dB above(AGC OFF)	
Gamma(γ)	γ=0.45	
AGC	ON	
IRIS	Electrical Auto Iris	
Shutter speed	1/60(50) ~ 1/100,000 sec	
Min. Illumination	0.5lx / F=1.2 (AGC ON) 0.5lx / F=1.2 (AGC ON)	
Lens	f=3.6mm, F2.0	
White balance	Automatic white balance control	
Power Consumption	DC 12V±1V / 220mA Max	DC 12V±1V / 150mA Max
OperatingTemp	-10℃~60℃	
Dimensions(mm)	105.3(W) x 127(H) x 105(D)	50(W) x 56(H) x 36.5(D)
Housing material	Plastic	

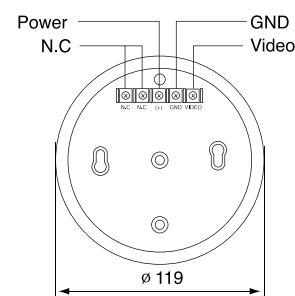
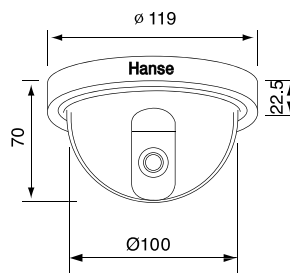
The product may include option or additional functions.

# DOME COLOR CAMERA

## HDC-270N/P



Compact design dome  $\varnothing$  119mm  
Auto white balance, AGC  
Clear image performance  
Durable dome cover

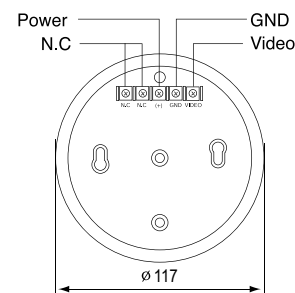
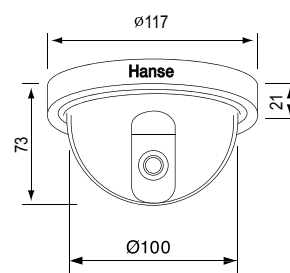


unit : mm

## HDC-280N/P



Low cost model  
Compact design dome  $\varnothing$  117mm  
Auto white balance, AGC  
Clear image performance  
Durable dome cover



unit : mm

## Specifications

Description	HDC-270N/P,HDC-280N/P
TV System	NTSC/PAL
Image sensor	1/4 Inch CCD 270K(320K) pixel
Effective pixel	510(H) x 492(V)/512(H) x 582(V)
Scanning system	525line 2:1 Interlacing/625line 2:1 Interlacing
Sync. System	Internal
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)
Horizontal resolution	330 TV lines above
Video output	1.0Vp-p./ 75ohm
S/N ratio	48dB above(AGC OFF)
Gamma( $\gamma$ )	$\gamma=0.45$
AGC	ON
IRIS	Electrical IRIS
Min. Illumination	0.5lx / F=1.4(AGC ON)
Lens	f=3.6mm / F=2.0
White balance	Automatic white balance control
Shutter speed	1/60~1/100,000/1/50~1/100,000
Power Consumption	DC 12V $\pm$ 1V / 300mA Max
Operating Temp.	-10 $^{\circ}$ C~60 $^{\circ}$ C
Dimensions(mm)	$\varnothing$ 119 x 70
Housing material	Zinc & Plastic

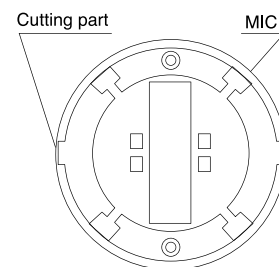
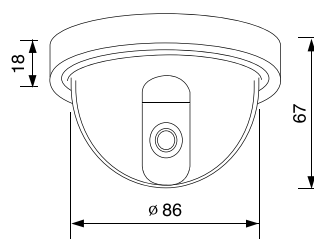
The product may include option or additional functions.

# DOME COLOR CAMERA

## HDC-300N/P



Compact design dome  $\varnothing 86\text{mm}$   
Auto white balance, AGC  
Clear image performance  
Durable dome cover



unit : mm

## Specifications

Description	HDC-300N/P
TV System	NTSC/PAL
Image sensor	1/4 Inch CCD 410K(470K) pixel
Effective pixel	768(H) x 494(V)/752(H) x 582(V)
Scanning system	525line 2:1 Interlacing/625line 2:1 Interlacing
Sync. System	Internal
Scanning frequency	15.734KHz(H), 59.94Hz(V)/15.625KHz, 50Hz(V)
Horizontal resolution	480 TV lines
Video output	1.0V p-p / 75ohm
S/N ratio	50dB above(AGC OFF)
Gamma( $\gamma$ )	$\gamma=0.45$
AGC	ON
IRIS	Electrical IRIS
Min. Illumination	0.5lx / F=1.4(AGC ON)
Lens	f=4.3mm / F 2.0 or f=3.6mm / F 2.0
White balance	Automatic white balance control
Shutter speed	1/60(1/50)~1/100,000
Power Consumption	DC 12V $\pm$ 1V / 160mA Max
Operating Temp.	-10 $^{\circ}\text{C}$ ~60 $^{\circ}\text{C}$
Dimensions(mm)	$\varnothing 118 \times 74.5$
Housing material	Zinc & Plastic

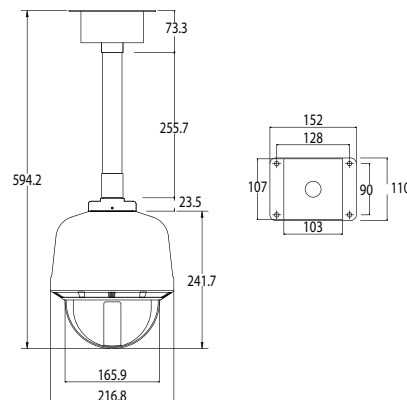
The product may include option or additional functions.

# PTZ SPEED DOME CAMERA

## HSC-230Si



High speed dome camera  
1/4" SONY Super HAD CCD  
22xOptical Zoom, 10xDigitalZoom,  
Total Zoom 220x  
Max. Pan travel speed - 360°/sec ,  
Tilt travel speed - 200°/sec ( On preset mode )  
International Standards : CE, FCC



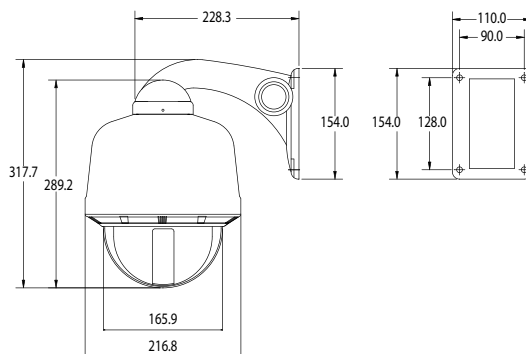
unit : mm

## HSC-230SE, HDK-255



### HSC-230SE

High speed dome camera  
For External Use Type  
1/4" SONY Super HAD CCD  
22xOpticalZoom, 10xDigitalZoom, Total  
Zoom 220x  
Max. Pan travel speed - 360°/sec ,  
Tilt travel speed - 200°/sec ( On preset mode )  
International Standards : CE, FCC



unit : mm



### HDK-255

Controller for receivers and dome cameras  
Preset control: 64 Positions memory set for each camera  
Controls up to maximum 255 CCTV city failure: Power,Auto Pan, Preset Position  
International Standards : CE

## Specifications

MODEL	DSC-230Si	HSC-230SE
TV system	NTSC/PAL	
Image sensor	1/4inch Type Sony super HAD CCD 380K(440K) Pixel	
Number of effective pixels	768(H) x 494(V)/752(H) x 582(V)	
Horizontal resolution	More than 480 TV lines	
Lens	22x Optical zoom, F 1.6(Wide) - 3.8(Tele), f =3.9~ 85.8mm	22x Optical zoom, F 1.6(Wide), f =3.9 / 85.8mm
Digital zoom	10x (Total zoom 220x)	
Minimum Object Distance	—	1cm(WIDE), 100cm(TELE)
Minimum Shooting Distance	1cm (WIDE) - 10m (TELE) , Max	
Minimum illumination	1.0 lx (30 IRE) / , 0.01lx with Electronic Sensitive Up	
Luminance S/N ratio	More than 50dB(AGC OFF)	More than 48dB (AGC Off)
Video output	1.0 Vp-p /75ohm	
Focus mode	—	Auto / Push-Auto / Manual
Brightness control	Manual ( Brightness Up/Down)	0(brightness down) - 99(brightness up) adjustable / Auto
White balance	Auto/Indoor/Outdoor/Push auto	Auto / Special / Indoor / Outdoor / Manual / Push Auto
BLC Control (WDR)	BLC Level ( 0 - 80 )	On / Off / Auto
AGC set	Auto / 8~ 38 dB selectable	Auto / Manual (8dB ~ 38 dB Control)
Iris Control	—	Auto / Manual (Iris Up / Down)
Shutter speed control	1/60(50) ~ 1/10,000 sec 28 steps	
Flickerless set	Off/On(1/100 sec shutter set)/Off/On(1/120 sec shutter set)	Off/On
Pan travel speed	Manual:0.7°-250°/sec (64 levels), Preset: Max 360°/sec (64 levels)	
Tilt travel speed	Manual:0.7°-90°/sec (64 levels), Preset: Max 200°/sec (64 levels)	
Preset point	64 Presets	64 Presets
Environment	Indoor	Indoor / Outdoor
Operating temperature	- 5°C to 60°C	-40°C to 60°C (-40° F to 140° F)
Storage temperature	- 15°C to 60°C	
Dimensions(mm)	189(D) x 224(H)	166(D) x 271(H)
Weight About	3.2Kg	5.0Kg
Construction	Ivory body ( ABS ), Bubble (poly carbonate)	Aluminum Steel body, Clear bubble (Poly-Carbonate)
Power consumption	18W (Max)	
Power Consumption	AC24V 60/50 Hz	

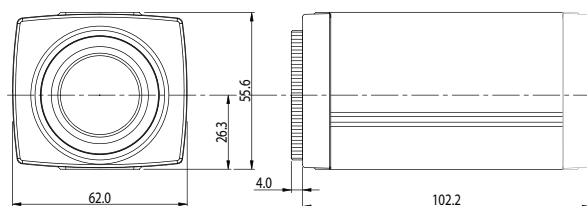
The product may include option or additional functions.

# ZOOM CAMERA

## HCC-Z265N/P



High Sensitive 1/4" Super HAD CCD  
410K Pixels (480 TV Lines)  
Built in Auto Focus / Auto Iris  
OSD (On Screen Display)  
High Durability Built In 22X Optical  
Power Zoom  
12X Digital Zoom (Total:264x Zoom)  
BLC, AGC  
2~12X Variable Digital Zoom ranges  
PELCO D Protocol included

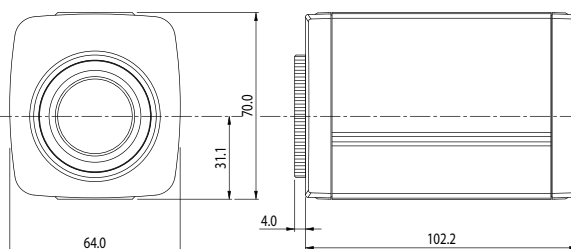


unit : mm

## HCC-Z270N/P



High Sensitive 1/4" Super HAD CCD  
410K Pixels (480 TV Lines)  
Built in Auto Focus / Auto Iris  
OSD (On Screen Display)  
High Durability Built In 34X Optical  
Power Zoom  
10X Digital Zoom (Total:340x Zoom)  
BLC, AGC  
2~12X Variable Digital Zoom ranges  
PELCO D Protocol included  
Wired Remote Controller (1.5m, 3.5m as optional)  
Day & Night Type (Digital Slow shutter & IR (Cut filter lens)  
RS-232 (optional)



unit : mm

## Specifications

MODEL	HCC-Z260N/P	HCC-Z270N/P
Signal Format	NTSC/PAL	
Scanning System	2 : 1 Interlace	
Scanning Frequency (H)	15.734(H)KHz x 59.94(V)Hz / 15.625(H)KHz x 50(V)Hz	
Pick-Up Device	1/4" SONY HAD CCD	
Total Pixels Number	811(H) x 494(V)410K / 795(H) x 596(V)470K	
Picture Element	768(H) x 494(V) / 752(H) x 582(V)	
S/N Ratio	More Than 48dB	
Horizontal Resolution	More Than 470TV Lines	
Lens	X22 Zoom [3.9mm~85.8mm,F1.6(W)~F3.7(T)]	X34 Zoom, video AF
Minimum Illumination	1 Lux (40 IRE) F1.6 [NORMAL] 1.0 Lux (40 IRE)	0.08LUX [DAY&NIGHT ON], 0.003LUX [DSS,B/W]
Digital Zoom Ration	Basic x 12 (Total Zoom Ration x 268 X2 ~ X12 Variable	
Sync System	Internal	
OSD (On Screen Display)	OSD On / Off	
Video Output	Composite Output 75 Terminated	
Camera Control	RS-485 / RS-232C(OPTION)	
Focus Mode	Auto / Manual	
Brightness Control	Manual (Brightness Up / Down)	
Sharpness Control	Manual (Sharpness Up / Down)	
Iris Control	Auto / Manual (Iris Up / Down)	
AGC Control	Auto / Manual (0~ 22 dB Control)	
Shutter Speed	1/60 ~ 1/10,000 Sec / 1/50 ~ 1/10,000 Sec	
White Balance	AWB / WAWB / Indoor / Outdoor / Manual	Auto / AWC / Indoor / Outdoor / Manual
Back Light Compen	On / Off	
Negative / Positive	Negative On /Off	
Day & Night(ICR)	—	Auto/ DAY/ NIGHT
Freeze	On / Off	
Operation Temperature	-10 ~ 50°C	
Operation Humidity	0 ~ 80% RH	
Storage Temperature	-20 ~ 60°C, 0 ~ 85% RH	
Power Consumption	DC12V ± 10% Max. 5.0W	64(W) X 70(H) x 102(D)
Dimensions	55.8(W) x 62(H) x 100(D)	450g
Weight	350g	

The product may include option or additional functions.







**CCTV LCD MONITOR**

# COLOR TFT LCD MONITOR

**HAVI-1510G**



**HAVI-1700G**



**HLM-563**



5.6" Monitor Rack Mountable  
CCTV Monitor  
Low power consumption  
Best quality image

## Specifications

Specifications	HAVI-1510G
Panel Type	15" TFT LCD
Display Area (mm)	307.20 x 230.40
Display Color	8bit, 16.7M
Pixel Pitch (mm)	0.297 x 0.297
Panel Resolution	1024 x 768, XGA
Contrast	400:1
Brightness	250 cd/m <sup>2</sup>
Viewing Angle	H: 130°, V: 100°
Response Time	25 ms
PC Analog	R.G.B
In/Out	Video
	Composite input
	S-Video input
Audio	PC Stereo in/output
	DVD input
Compatibility	IBM, Macintosh PC
Plug & Play	VESA DDC 1/2B
Power Management	VESA DPMS
Others	Speaker
	2W x 2W
	Screen Control
	On Screen Display Menu
	Tilting Degree(U/D)
	30° / -5° degree
	Certificate
	FCC, VCCI, CE, MIC

Specifications	HAVI-1700G
Panel Panel type	17"(43cm) TFT LCD
Display Area	337.92mm x 270.33mm
Display Color	8bit, 16.7M
Pixel Pitch	0.264mm x 0.264mm
Resolution	1280 x 1024, SXGA
Contrast	450 : 1
Brightness	250cd/m <sup>2</sup>
Viewing Angle	H: 140° V:120°
Response Time	16ms
PC Analog	R.G.B
In/Out	Video
	Composite input, S-Video input
Audio	PC Stereo in/output, DVD L/R input
TV Signal	Antenna
	75 ohm Coaxial Cable
	Color System
	NTSC,PAL/SECAM
	Sound System
	M,B/G,D/K,L
Others	Compatibility
	IBM , Macintosh PC
	Plug & Play
	VESA DDC 1/2B
	Power Management
	VESA DPMS
	Speaker
	3W x 3W
	Screen Control
	On Screen Display Menu
	Tilting Degree(U/D)
	30° / -5° degree
	Swivel Degree(L/R)
	—
	Certificate
	FCC,CE,VCCI,MIC

Specifications	HLM-563
Screen size	5.6" Diagonal
Color configuration	RGB Stripe Configuration
Dot Pitch	0.118(W) x 0.362(H)mm
Resolution	960 x 234(dot)
Active Area	113.78(W) x 84.70(H)mm
View angle	Top : 10, Lower : 30, Left :45, Right : 45
Contrast Ratio	150
Brightness	300 cd/m <sup>2</sup>

The product may include option or additional functions.



# **STANDALONE DVR & SWITCHER**

# STANDALONE DVR

## HDV-701N/P



The best quality, Economic price DVR Equipment

\* Triplex : Recording & Playback & Live

MJPEG Type

Video Recording Resolution Up to 720 x 480(576-PAL)

Simultaneous Recording, Playback and Search (30 fps)

Motion Detection available

Power Loss Auto-Recovery

Programming function of Korean, English, Japanese

Recording Function of Variety Quality

Relay output : Able to add In/Output Alarms via connection to a contact point In/Output terminal

Pan/Tilt controller( Option)

\* Time Lapse VCR recording Interface

\* Remote Controller

### Specifications

Description	HDV-701
Video Camera Input	NTSC /PAL
Video Signal Input	Vp-p 75 Ohm, Input RCA (4Ch)
Output	Vp-p 75 Ohm, Output RCA
Audio Input / Output	2 X RCA (1CH Input, 1CH Output) - Optional
Recording	Mode Mono PCM
Display Display Frame	120 FPS (Total)
Display Resolution	720 x 480 x 720 x 576
Screen Split Mode	Full, Auto, Quad
Triplex Mode	Triplex (Simultaneous Recording/Playback/Live)
Recording Video Compression	Real-time full duplex M-JPEG codec core
Video Resolution	720 (360) x 480 (240) / 720 (360) x 576 (288)
Recording method	Continuous, Scheduled, Alarm, Event (motion detect)
Recording FPS	30 (120) FPS / PAL : 25 (100) FPS
Image File Size	3 ~ 25 KB / 4 ~ 27 KB
PTZ Control	N/A
Playback Playback mode	Live & Playback, Playback
Playback Screen Mode	Full, Quad, Split
Search	Search by Date/ Time List, Event List
Zoom Mode	N/A
Alarm Control External Alarm Input	N/A
Alarm Output	N/A
Network Protocol	N/A
Resolution	N/A
Remote Control	N/A
Browser	N/A
Recording	N/A
Data Backup	USB - Optional
Others Remote Control	IR Remote Control
Power Supply	12V 3.5A DC Adaptor
Dimension	243 x 200 x 53 (mm), (WxHxD)
Weight	1.33KG (w/o HDD)
Certification	CE, FCC

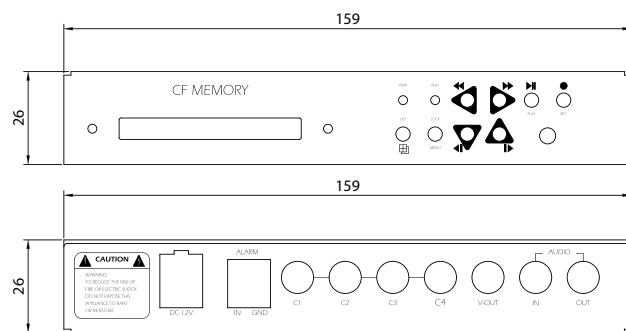
The product may include option or additional functions.

# STANDALONE DVR

## HDV-702CF



Stand Alone DVR(Model:HDV-702CF) has developed a high quality, economic price and color video processors capable of displaying full screen , quad views of 4~8 camera inputs. HDV-702CF has simultaneous record and play black function with real playback for multi-task security application. HDV-702CF was designed to apply for any circumstances of automobile happening and safety. HDV-702CF is easy to install in variety places (Automobile, Shop, etc) and easy to compatible with CCTV products.



unit : mm

## HDV-400S, HDV-400A, HDV-401



### Specifications

Description	HDV-702CF	Description	HDV-400S, HDV-400A, HDV-401
Video Camera Input	NTSC / PAL	OS Realtime	OS
Video Signal Input	Vp-p 75 Ohm, Input RCA (4Ch)	Video Input	4 Channel
Output	Vp-p 75 Ohm, Output RCA	Video Output	2 Channel
Audio Input / Output	2 X RCA (1CH Input, 1CH Output) - Optional	Video Input Standard	NTSC / PAL
Recording	Mode Mono PCM	Monitoring Resolution	720 x 480 / 720 x 576
Display Display Frame	120 FPS (Total)	Recording Resolution	640 x 224 / 640 x 272
Display Resolution	720 x 480 / 720 x 576	Display frame rate	120 fps(Quad), 30fps(Each) / 110 fps(Quad), 5fps(Each)
Screen Split Mode	Full, Auto, Quad	Recording Frame rate	30 fps(Quad), 7.5fps(Each) / 25 fps(Quad), 6.25fps(Each)
Triplex Mode	Triplex (Simultaneous Recording/Playback/Live)	Display Mode	QUAD
Recording Video Compression	Real-time full duplex M-JPEG codec core	Compression Format	Motion JPEG
Video Resolution	720 (360) x 480 (240) / 720 (360) x 576 (288)	Image Size	L: 12 kbytes/frame, N: 15 kbytes/frame, H: 20 kbytes/frame
Recording method	Continuous, Scheduled, Alarm, Event (motion detect)	HDD Capacity	HDD x 2(Optional)
Recording FPS	30 (120) FPS / PAL : 25 (100) FPS	Motion detection	ON / OFF Control
Image File Size	3 ~ 25 KB / 4 ~ 27 KB	Audio	Option / 1 Ch / 1 Ch
PTZ Control	N/A	Network Monitoring	N/A / N/A / Available
Playback Playback mode	Live & Playback, Playback	PTZ	Option / Yes / Yes
Playback Screen Mode	Full, Quad, Split	Sensor / Alarm	4Ch Input / 1Ch Output
Search	Search by Date/ Time List, Event List		
Zoom Mode	N/A		
Alarm Control External Alarm Input	Alarm Inpyt : Terminal Block 1		
Alarm Output	N/A		
Network Protocol	N/A		
Resolution	N/A		
Remote Control	N/A		
Browser	N/A		
Recording	N/A		
Data Backup	USB - Optional		
Others Remote Control	IR Remote Control		
Power Supply	12V 3.5A DC Adaptor (Locking wafer type)		
Dimension	159 x 105 x 28 (mm), (WxHxD)		
Weight	550G (w/o CF-Memory)		
Certification	CE, FCC		

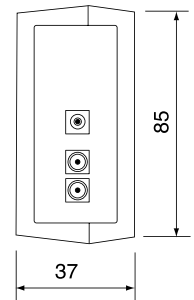
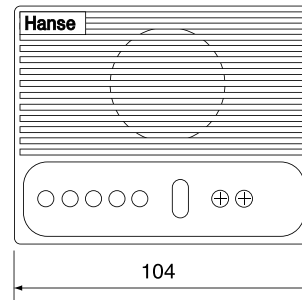
The product may include option or additional functions.

# 4CH SWITCHER

## HSW-40B

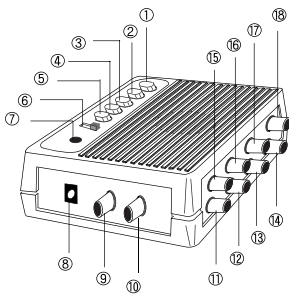


Sequentially switches up to 4 B/W or color cameras  
When connected to any camera or PIR. It will trigger any device, and stop switching and hold on the corresponding camera channel.  
The unit will also operate with Cameras but will not feature the Alarm hold function.  
Both the Alarm Hold Time and Camera switching time can be adjusted between 1 to 60 seconds.  
Provides power for up to 4 of the cameras installation quick, simple and neat.  
Switches through cameras automatically or manually.  
Auto switchable video and audio



unit : mm

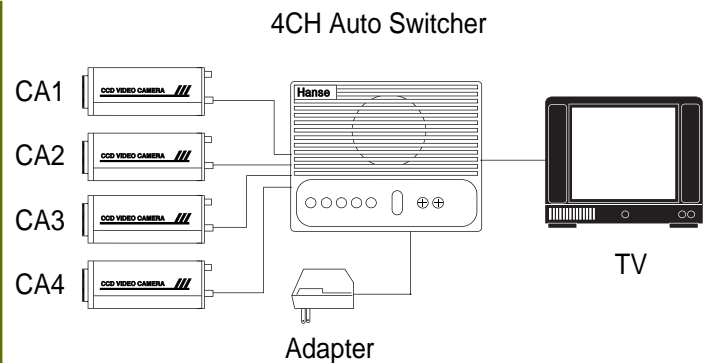
### Name of each parts



#### HSW-40B

- ① Auto S/W button
- ② Manual S/W for CH1 camera
- ③ Manual S/W for CH2 camera
- ④ Manual S/W for CH3 camera
- ⑤ Manual S/W for CH4 camera
- ⑥ ADD S/W
- ⑦ Dwell Time Control(1~60sec)
- ⑧ Power
- ⑨ Audio
- ⑩ Video
- ⑪~⑭ Audio1~Audio4
- ⑮~⑰ Video1~Video4

### Wiring Network



A stylized orange silhouette of a car is positioned in the upper half of the image. The car's body is represented by a large, rounded shape on the left, and the rear section, including the trunk and a spoiler, is on the right. The text 'CAR REAR VIEWER SYSTEM' is overlaid on the car's body.

# CAR REAR VIEWER SYSTEM

# CAR REAR VIEWER SYSTEM

## HML-M560N/P



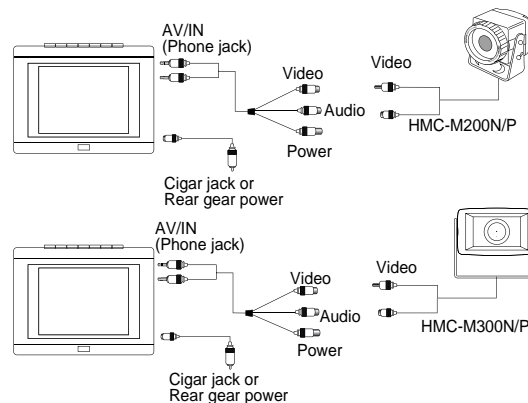
HMC-M300N/P, M301N/P



HMC-410



HMC-M200N/P, M201N/P



## HLM-M700L



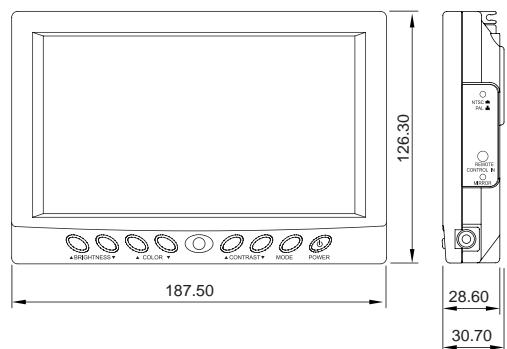
HMC-M300N/P, M301N/P



HMC-410



HMC-M200N/P, M201N/P



unit : mm

## Specifications

ITEM MONITOR	HLM-560N/P	ITEM MONITOR	HLM-700L
LCD	5.6 inch TFT LCD Color	LCD 7 inch Wide	TFT LCD Color(16:9 diagonal)
TV System	NTSC /PAL	TV System	NTSC / PAL Automatically switching
Resolution	86,000 pixels	Resolution	1440(H) x 234(V) dot
Color Configuration	RGB Delta Configurational, Composite Sync.	Dot Pitch	0.107(H) x 0.372(V)
Dot Pitch	0.210(W) x 0.259(H)	View Angle	Horizontal: 60°, Vertical: 50°(6 oclock)/40°(12 oclock)
View Angle	Horizontal: 45°, Vertical: 30°	Contrast Ratio	150
Contrast Ratio	60	Brightness	400 cd/m <sup>2</sup>
Brightness	250cd/m <sup>2</sup>	Video Input	Color Composite(CVBS) 1Vp_p / 75ohm
Video Input	Color Composite(CVBS) 1Vp_p / 75ohm	Operating voltage	DC 11V~DC 32V
Power Consumption	DC 12V, 540mA(Adaptor - DC 12V, 1.5A SMPS)	Power Consumption	DC 12V/0.67A DC 24V/0.36A
Assurance Temperature	0℃~60℃	Assurance Temperature	0℃~40℃
Mounting Type	Desk Top	Mounting Type	Desk Top
Input Impedance	75 ohm	Dimension/Weight	187.5(W) x 126.3(H) x 30.7(D)/1.0kg
AV Input	3.5mm MINI 4p Type Stereo Jack	Adjustment	1. Picture Adjustment: Brightness, Color, Contrast
Video Input	1.0Vp-p(75ohm) composite		2. Picture Size Adjustment:
	Video(3.5mm MINI 4p Type Stereo)		Normal(4:3), Full(16:9), Wide(16:9)
Internal Speaker	0.4W 32ohm		3. Mirror no/off
Weight	1.0kg	Input	Video/Camera/Power input cable
Dimensions(mm)	165(W) x 125(H) x 41.5(D)		

The product may include option or additional functions.

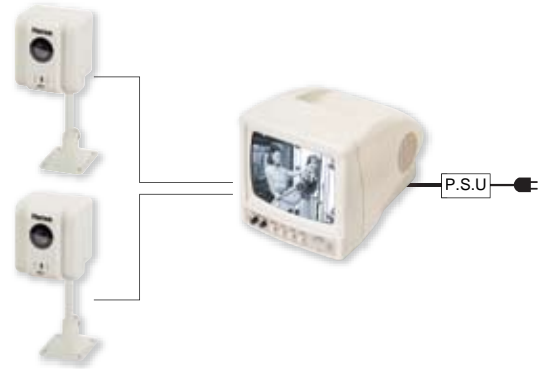


# OBSERVATION SYSTEM & PIR SENSOR SYSTEM

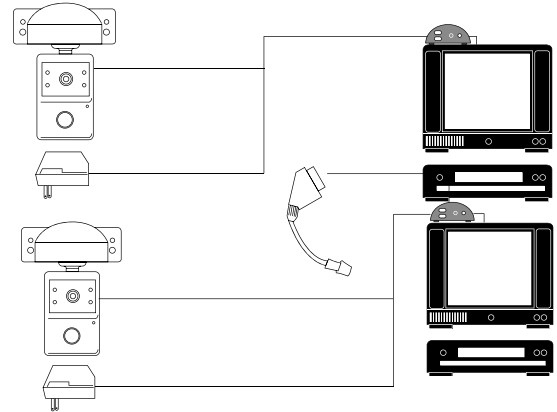
## HBM-50A/C



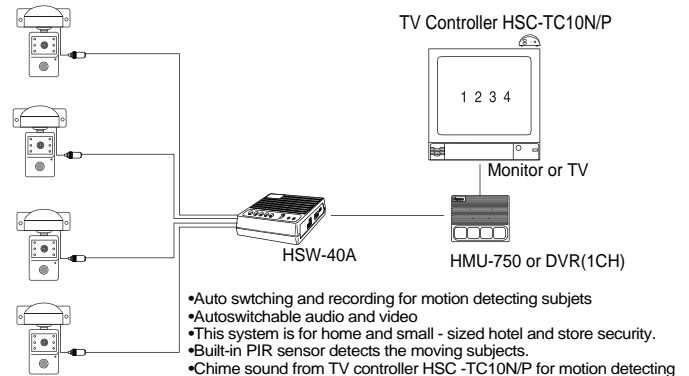
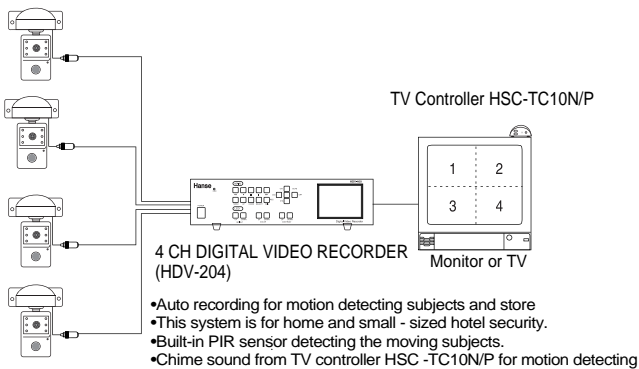
Switchable two cameras for monitor  
Making the installation much safer and easier  
Built in one way audio function  
Low power consumption and sharpness sensitivity.  
Auto Switchable 2 channel selection by PLL program  
Automatic Gain Control built in for a consistent image output  
Superior high S/N ratio Video and Audio outputs.  
Compact & light



## HTS-500N/P, HTS-500A/C



## Pir observation system



## Specifications

Description	HBM-50A/C	Description	HTS-500N/P(Color)	HTS-500A/C(B/W)
TV System	EIA or CCIR	Image Sensor	1/4 inch color	1/3 inch B/W
Picture Tube	5.5"Black & White	Pixel.no	270K(320K) pixels	270K(320K) pixels
Resolution	480TV Line	Video Out put	1VP-P 75ohm	1VP-P 75ohm
Scanning Frequency	15.734KHz(H) x 59.94Hz(V)EIA 15.625KHz(H) x 50Hz(V)CCIR	TV System	NTSC or PAL, SECAM	EIA or CCIR
Audio Output	1Vp-p 600ohm	Resolution	330 TV Line	380 TV Line
Video output	1Vp-p 75ohm(RCA Jack)	S/N Ratio	48 dB	48 dB
Power Consumption	13.5V DC	Correction(γ)	γ=0.45	γ=0.45
Working Temperature	-10℃~60℃	Audio Out put	0.36W	0.36W
Scan Time	1~30sec.	Audio Impedance	600ohm	600ohm
Speaker	57m/m Round	Min.Illumination	0.5LX	0.1 LX
Supply Current	1,000mA, typ.	Lens	3.6 mm	3.6 mm
Audio/Video	600ohm, 45dB/ 1Vp-p 75ohm	Power Consumption	2V DC±10%, 200mA Max.	
Input Signal level	65dBm	Oper.Temperature	-10℃~60	
Weight	1,200g	IR.LED	NONE	890 nm 4 Pcs
Dimensions(mm)	146.5(W) x 142.5(H) x 195(D)	Shutter Speed	1/60 sec~1/100,000 sec	1/60 sec~1/120,000 sec

The product may include option or additional functions.







# Hanse Electronics Co., Ltd web site

Hanse : <http://www.hanseelec.co.kr/>



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- 700 SERIES
- 500 SERIES

Hanse : <http://hanse.manufacturer.globalsources.com/>



## SITEMAP

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### 09 Trading Services

# Hanse

Hanse Electronics Co., Ltd.  
[www.hanseelec.com](http://www.hanseelec.com) [www.hanseelec.co.kr](http://www.hanseelec.co.kr)

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