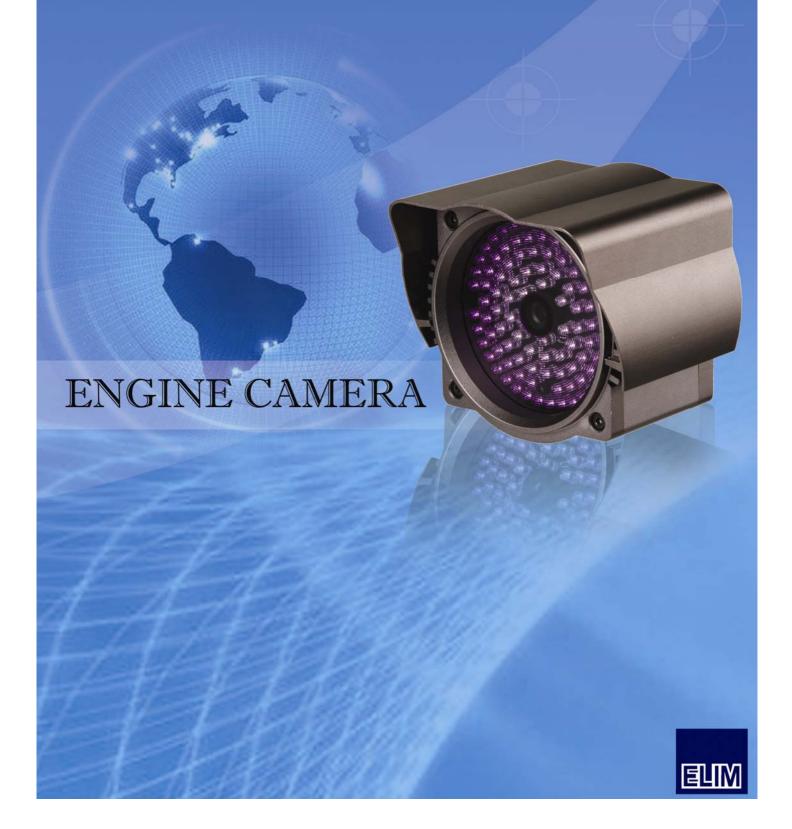


ELLIM continues to supply digiralized various surveillance system and high-performance security units which are equipped with the most sophisiticated technologies - most stable surveillance systems for most complicated security circumstances - for security of your life & property



1/3 inch HIGH SENSITIVE SHARP Day & night IR LED CAMERA



ENG -3356W

KEY FEATURES

- World finest Visible 850nm IR LED x 56ea Built-in (World longest visibility Range: Real 30M (Approx. 90feet))
- 1/3" SHARP High Sensitive 380TVL High Performance image Sensor (Min Illumination: 0.056lux(LED OFF))
- Color at Day time and B/W at Night time controlled by CDS Sensor without Random noise
- Dynamic IR LED ON/OFF controlled by Digitalized CDS Sensor
 No malfunctions at dawn, dusk or any twilight time
- Stable Electronic current supply controlled by digitalized mechanism
- ILCG™ IR LED Contrast filtered-Front Cover Glass
 No Fluorescent material, No dye Glass For long Range IR LED Light distance without any interference.
- IR LED CUT coated CDS Sensor Built-in Sensoring all of spectrum precisely and automatically.
- IR LED Temperature Feed back Circuit Advanced IR LED Protection through control Electronic Current.
- Accidental Surge from air and Shock Protector Built-in for stable application.
- Reverse Polarity Power Protection Circuit Built-in and extremely Low Power Consumption
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Extremely High Electronic Voltage Tolerance level Min.20V ~ Max.19V for high performance

1/3 inch SONY SUPER HAD 480TVL IR LED CAMERA



ENG -5056WT

KEY FEATURES

- World finest Visible 850nm IR LED x 56ea Built-in (World longest visibility Range: Real 50M (Approx. 150feet))
- 1/3" SONY SUPER HAD 480TVL image Sensor Built-in (Min Illumination: 0.3lux(LED OFF))
- TMIC™ Triple Micom (Digital Micro Proccessor) IC Control System Built-in.
 - -True color at Day Time and True B/W at night time controlled by digital TMIC™ No Color Signal at Night!! Noise free!!
 - Accurate IR LED ON/OFF controlled by Digital TMIC™ No ghost effects or malfuntions at dawn, dusk or any twilight time
 - Stable electric current supply for IR LED controlled by Digital TMIC™ It make longer 3 times of IR LED's life!!
- ILCG[™] IR LED Contrast filtered-Front Cover Glass
 - No Fluorescent material, No dye Glass For long Range IR LED Light distance without any interference.
- IR LED CUT coated CDS Sensor Built-in Sensoring all of spectrum precisely and automatically.
- IR LED Temperature Feed back Circuit Advanced IR LED Protection through control Electronic Current.
- Accidental Surge from air and Shock Protector Built-in for stable application.
- Reverse Polarity Power Protection Circuit Built-in and extremely Low Power Consumption.
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Extremely High Electronic Voltage Tolerance level Min.7V ~ Max.32V for high performance



MODEL	ENG – 3356W	ENG-5056WT	
Image Sensor	1/3" SHARP High Sensitive Newest 603 Version	1/3" SONY SUPER HAD	
H. Resolution/	NTSC/PAL – 380TVL(2:1 Interlaced)		
Scanning System	NTSC(525TVL) : 512x492, PAL(625TVL) : 500x582		
Min. Illumination	0.056Lux (IR LED OFF)	0.1Lux (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz, V	Vertical:59,94Hz	
Video output Level	1.0Vp-p (75ohms,	Composite)	
S/N Ratio	More than 48dB(AGC Off)	More than 50dB(AGC Off)	
Gamma	r= 0.45 or	more	
White Balance	2,100°K – 9,200	°K - Auto	
Gain Control	4dB – 32dB - Auto		
ID LED On a bility	Visible 5mm Diameter (850nm, 20°)x56ea	Visible 5mm Diameter (850nm, 20°)x40ea	
IR LED Capability	Dynamic IR LED On/Off	Visible 5mm Diameter (850nm, 30°)x16ea	
Visibility Range	Real 30 Meter (Approx. 90 Feet) / Max 40 Meter (120Feet)	Real 50 Meter (Approx. 150 Feet)	
CDS Sensor	Digital MICOM IC Controlled IR LED On/Off at 5 Lux		
Color / BW Control	Color at Day time & B/W at Night time		
Color / BVV Control	Digital MICOM IC Controlled C	color Signal Changeable.	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)		
	STD Lens : f = 8.0mm IR Lens (AOV : 68°)		
Lens	3.6mm / 4.3mm / 6mm	/ 12mm / 16mm	
MTTF	80,000 Hour (Easy Changeable IR LED 80,000 Hour)		
	DC12V 1A Regulated (Normal)	DC12V 1A Regulated (Normal)	
Power Source	DC8V -20V (Input Power:Max.560mA)	DC7V -32V TMIC ™ (Input Power:Max.560mA)	
Dimensions (WxHxD/mm)	82.0 x 76.0 x 71.0 (w/Sunshield)		
Net Weight	480g (w/Sunshield)	420g (w/Sunshield)	



240feet(80M) Nightview Digitalized IR LED Weatherproof CAMERA



ENG -5004WT

KEY FEATURES

- World greatest Visible 850nm IR LED x 105ea Built-in (World longest visibility Range: Real 80M (Approx. 240feet))
- 1/3" SONY SUPER HAD 380TVL image Sensor Built-in (Min Illumination: 0.1lux(LED OFF))
- TMIC ™ Triple Micom (Digital Micro Processor) IC Control System Built-in
 - True color at day Time and True B/W at night time controlled by Digital TMIC ™
- Accurate IR LED ON/OFF controlled by Digital TMIC ™
- Stable Electric current supply for IR LED controlled by Digital TMIC ™
- ZLCG[™] IR LED Light Enhanced Front Cover Glass(World First Coated Polycarbonate Front Cover)
- Digitalized CDS Sensor Built-in Sensoring all of Spectrum precisely and changing Digital Signal automatically.
- IR LED Temperature Feed back Circuit Advanced IR LED Protection.
- Accidental Surge and Shock Protector Built-in.
- Reverse Polarity Power Protection Circuit Built-in
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Easy First-Aid mechanism All of parts exchangeable easily by user (Including IR LED Board)

	ENG – 5004WT	
Image Sensor	1/3" SONY SUPER HAD (270K Pixels.)	
H. Resolution/	NTSC/PAL - 380TVL(2:1 Interlaced)	
Scanning System	NTSC(525TVL) : 512x492, PAL(625TVL) : 500x582	
Min. Illumination	0.1Lux (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz, Vertical:59,94Hz	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 50dB(AGC Off)	
Gamma	r= 0.45 or more	
White Balance	2,100°K - 9100°K - Auto	
Gain Control	4dB – 32dB - Auto	
IR LED Conshility	Visible 5mm Diameter (850nm, 20°)x105ea	
IR LED Capability	Visible 5mm Diameter (850nm, 30°)x105ea	
Visibility Range	World longest 80Meter(Approx. 240Feet.)	
CDS Sensor	TMIC ™ Controlled IR LED On/Off at 3Lux	
Color / BW Control	True Color at Day time & True B/W at Night time	
Color / BVV Control	TMIC ™ Controlled Color Signal Changeable.	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)	
Lens	STD Lens : f = 6.0mm IR Lens (AOV : 74°)	
Lens	3.6mm / 4.3mm / 8mm / 12mm / 16mm	
MTTF	20,000 Hour (Easy Changeable IR LED 20,000 Hour)	
Power Source	DC12V 1A Regulated (Normal)	
i owel soulce	DC8V -20V TMIC ™ controlled (Input Power 600mA)	
Dimensions (WxHxD/mm)	110 x 100 x 71 (w/Sunshield)	
Net Weight	720g (w/Sunshield)	



1/3 inch HIGH SENSITIVE SHARP Day & night IR LED CAMERA



KEY FEATURES

ENG -3304W

- World finest Visible 850nm IR LED x 105ea Built-in (World longest visibility Range: Real 50M (Approx. 150feet))
- 1/3" SHARP High Sensitive 380TVL High Performance image Sensor Built-in (Min Illumination: 0.056lux(LED OFF))
- Color at Day time and B/W at Night time controlled by CDS Sensor without Random noise
- Dynamic IR LED ON/OFF controlled by Digitalized CDS Sensor
 No malfunctions at dawn, dusk or any twilight time
- Stable Electric current supply controlled by digitalized mechanism
- ILCG™ IR LED Contrast filtered-Front Cover Glass
 No Fluorescent material, No dye Glass For long Range IR LED Light distance without any interference.
- IR LED CUT coated CDS Sensor Built-in Sensoring all of spectrum precisely and automatically.
- IR LED Temperature Feed back Circuit Advanced IR LED Protection through control Electronic Current.
- Accidental Surge from air and Shock Protector Built-in for stable application.
- Reverse Polarity Power Protection Circuit Built-in and extremely Low Power Consumption
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Extremely High Electronic Voltage Tolerance level Min.8V ~ Max.20V for high performance
- Easy First-Aid mechanism All of parts exchangeable easily by User (Including IR LED Board)



	ENG – 3304W	
Image Sensor	1/3" SHARP IR filtered super Sensitive	
H. Resolution/	NTSC/PAL - 380TVL(2:1 Interlaced)	
Scanning System	NTSC(525TVL): 512x492, PAL(625TVL): 500x582	
Min. Illumination	0.056Lux (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz, Vertical:59,94Hz	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 48dB(AGC Off)	
Gamma	r = 0.45 or more	
White Balance	2,100°K - 9200°K - Auto	
Gain Control	4dB – 32dB - Auto	
IR LED Conshility	Visible 5mm Diameter (850nm, 30°)x56ea	
IR LED Capability	Dyanamic IR LED On/Off	
Visibility Range	Real 50 Meter (Approx. 180 Feet)	
CDS Sensor	Digital MICOM IC Controlled IR LED On/Off at 5 Lux	
Color / BW Control	Color at Day time & B/W at Night time	
Color / BVV Cortifor	Digital MICOM IC Controlled Color Signal Changeable.	
Operating Temperature (Humidity)	- 10°C - +60°C (10% - 95% RH)	
Lens	STD Lens : f = 6.0mm IR Lens (AOV : 68°)	
Lens	3.6mm / 4.3mm / 8mm / 12mm / 16mm	
MTTF	80,000 Hour (Easy Changeable IR LED 80,000 Hour)	
Power Source	DC12V 1.5A Regulated (Normal)	
rowel Soulce	DC8V -20V (Input Power:Max.720mA)	
Dimensions (WxHxD/mm)	110 x 100 x 71(w/Sunshield)	
Net Weight	680g (w/Sunshield)	



WORLD FINEST 100MA high light IR LED BUILT-IN



KEY FEATURES

ENG -5012W

- World Best 100mA Visible 850nm IR LED x 12ea Built-in (visibility Range: Real 10M (Approx. 30feet))
- 1/3" SONY SUPER HAD 420TVL High Performance image Sensor Built-in (Min Illumination: 0.1lux(LED OFF))
- Color at Day time and B/W at Night time controlled by CDS Sensor without noise
- Dynamic IR LED ON/OFF controlled by Digitalized CDS Sensor
 No missed malfunctions at dawn, dusk or any twilight time
- Stable Electric current supply controlled by Digitalized mechanism
- ILCG™ IR LED Contrast filtered-Front Cover Glass (Manufactured by SCHOTT AG, Germany)
 No Fluorescent material, No dye Glass For long Range IR LED Light distance without any interference.
- IR LED CUT coated CDS Sensor Built-in Sensoring all of spectrum precisely and automatically.
- IR LED Temperature Feed back Circuit Advanced IR LED Protection through control Electronic Current.
- Accidental Surge from air and Shock Protector Built-in for stable application.
- Reverse Polarity Power Protection Circuit Built-in and extremely Low Power Consumption
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Extremely High Electronic Voltage Tolerance level Min.8V ~ Max.19V for high performance



	ENG – 5012W	
Image Sensor	1/3" SONY SUPER HAD (270K Pixels.)	
H. Resolution/	NTSC/PAL – 420TVL(2:1 Interlaced) NTSC(525TVL) : 512x492, PAL(625TVL) : 500x582	
Scanning System		
Min. Illumination	0.1Lux / F1.6 (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz(NTSC) / 15,625Hz(PAL)	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 50dB(AGC Off)	
Gamma	r= 0.45	
White Balance	2,100°K - 9500°K - Auto	
Gain Control	4dB – 32dB - Auto	
IR LED Canability	100mA Visible 10mm Diameter (850nm)x12ea	
IR LED Capability	Each channel have 100mA Max.	
Visibility Range	Real 10 Mete or more (Approx. 30 Feet)	
CDS Sensor	IR CUT coated CDS Sensor control IR LED On/OFF at 4-10Lux	
CD3 Serisor	Dynamic IR LED Turn On & Off automatically	
Color / BW Control	Color at Day time & B/W at Night time changed automatically	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)	
Lone	STD Lens : f = 4.0mm IR Lens (AOV : 86° Max)	
Lens -	3.6mm / 4.3mm / 6mm / 8mm / 12mm	
MTTF	20,000 Hour (Easy Changeable IR LED 20,000 Hour)	
Dower Course	DC12V 280mA Regulated (Normal)	
Power Source	DC8V -22V -High Tolerance	
Dimensions (WxHxD/mm)	82.0 x 76.0 x 71.0(w/Sunshield)	
Net Weight	210g (w/Sunshield)	



WORLD FINEST 100MA high light IR LED BUILT-IN



KEY FEATURES

ENG -3212W

- World Best 100mA Visible 850nm IR LED x 12ea Built-in (visibility Range: Real 10M (Approx. 30feet))
- 1/4" SHARP High Sensitive 380TVL High Performance image Sensor Built-in (Min Illumination : 0.5lux(LED OFF))
- Color at Day time and B/W at Night time controlled by CDS Sensor without noise
- Dynamic IR LED ON/OFF controlled by Digitalized CDS Sensor
 No missed malfunctions at dawn, dusk or any twilight time
- Stable Electric current supply controlled by Digitalized mechanism
- ILCG™ IR LED Contrast filtered-Front Cover Glass (Manufactured by SCHOTT AG, Germany)
 No Fluorescent material, No dye Glass For long Range IR LED Light distance without any interference.
- IR LED CUT coated CDS Sensor Built-in Sensoring all of spectrum precisely and automatically.
- IR LED Temperature Feed back Circuit Advanced IR LED Protection through control Electronic Current.
- Accidental Surge from air and Shock Protector Built-in for stable application.
- Reverse Polarity Power Protection Circuit Built-in and extremely Low Power Consumption
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Extremely High Electronic Voltage Tolerance level Min.8V ~ Max.20V for high performance



	ENG – 3212W	
Image Sensor	1/4" SHARP High Sensitive (270K Pixels/320K Pixels)	
H. Resolution/	NTSC/PAL – 380TVL(2:1 Interlaced)	
Scanning System	NTSC(525TVL) : 512x492, PAL(625TVL) : 500x582	
Min. Illumination	0.056Lux / F1.6 (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz(NTSC) / 15,625Hz(PAL)	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 48dB(AGC Off)	
Gamma	r= 0.45	
White Balance	2,100°K - 9500°K - Auto	
Gain Control	4dB – 32dB - Auto	
IR LED Capability	100mA Visible 10mm Diameter (850nm)x12ea	
IN LED Capability	Each channel have 100mA Max.	
Visibility Range	Real 10 Mete or more (Approx. 30 Feet)	
CDS Sensor	IR CUT coated CDS Sensor control IR LED On/OFF at 4-10Lux	
CD3 Serisor	Dynamic IR LED Turn On & Off automatically	
Color / BW Control	Color at Day time & B/W at Night time changed automatically	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)	
Lens	STD Lens : f = 3.6mm IR Lens (AOV : 92° Max)	
Lens	4.3mm / 6mm / 8mm / 12mm	
MTTF	80,000 Hour (Easy Changeable IR LED 40,000 Hour)	
Dower Course	DC12V 290mA Regulated (Normal)	
Power Source -	DC8V -20V -High Tolerance	
Dimensions (WxHxD/mm)	82.0 x 76.0 x 71.0(w/Sunshield)	
Net Weight	210g (w/Sunshield)	



240feet(80M) Nightview Digitalized IR LED Weatherproof CAMERA



ENG -2004WT

KEY FEATURES

- World greatest Visible 850nm IR LED x 105ea Built-in (World longest visibility Range: Real 80M (Approx. 240feet))
- 1/3" SONY SUPER HAD 480TVL image Sensor Built-in (Min Illumination: 0.3lux(LED OFF))
- TMIC ™ Triple Micom (Digital Micro Processor) IC Control System Built-in
 - True color at day Time and True B/W at night time controlled by Digital TMIC ™
- Accurate IR LED ON/OFF controlled by Digital TMIC ™
- Stable Electric current supply for IR LED controlled by Digital TMIC ™
- ILCG™ IR LED Light Enhanced Front Cover Glass(World First Coated Polycarbonate Front Cover)
- Digitalized CDS Sensor Built-in Sensoring all of Spectrum precisely and changing Digital Signal automatically.
- IR LED Temperature Feed back Circuit Advanced IR LED Protection.
- Accidental Surge and Shock Protector Built-in.
- Reverse Polarity Power Protection Circuit Built-in
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Easy First-Aid mechanism All of parts exchangeable easily by user (Including IR LED Board)

	ENG – 2004WT	
Image Sensor	1/3" SONY SUPER HAD High Resolution (410K Pixels.)	
H. Resolution/	NTSC/PAL – 480TVL(2:1 Interlaced)	
Scanning System	NTSC(525TVL): 768x494, PAL(625TVL): 752x582	
Min. Illumination	0.3Lux (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz, Vertical:59,94Hz	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 50dB(AGC Off)	
Gamma	r= 0.45	
White Balance	2,100°K - 9100°K - Auto	
Gain Control	4dB – 32dB - Auto	
ID LED Conshility	Visible 5mm Diameter (850nm, 20°)x63ea	
IR LED Capability	Visible 5mm Diameter (850nm, 30°)x42ea	
Visibility Range	World longest 80Meter(Approx. 240Feet.)	
CDS Sensor	TMIC ™ Controlled IR LED On/Off at 5Lux	
Color / BW Control	True Color at Day time & True B/W at Night time	
Color / BW Control	TMIC ™ Controlled Color Signal Changeable.	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)	
Lens	STD Lens : f = 6.0mm IR Lens (AOV : 68°)	
Lens	3.6mm / 4.3mm / 8mm / 12mm / 16mm	
MTBF	20,000 Hour (Easy Changeable IR LED 20,000 Hour)	
Power Source	DC12V 1A Regulated (Normal)	
i ower source	DC9V -15V TMIC ™ controlled (Input Power 650mA)	
Dimensions (WxHxD/mm)	110 x 100 x 71 (w/Sunshield)	
Net Weight	720g (w/Sunshield)	



World First 10mm DIAMETER Visible IR LED



KEY FEATURES

ECG -2042WT

- World First Powerful 10mm Diameter Visible 850nm IR LED x 42ea Built-in (Visibility Range: Real 80M (Approx. 240Feet)
- 1/3" SONY SUPER HAD 480TVL High Resolution image Sensor Built-in (Min Illumination : 0.3lux(LED OFF))
- TMIC™ Triple Micom (Digital Micro Proccessor) IC Control System Built-in.
 - -True color at Day Time and True B/W at night time controlled by digital TMIC™ No Color Signal at Night!! Noise free!!
 - Accurate IR LED ON/OFF controlled by Digital TMIC™ No ghost effects or malfuntions at dawn, dusk or any twilight time
 - Stable electric current supply for IR LED controlled by Digital TMIC™ It make longer 3 times of IR LED's life!!
- ILCG™ IR LED Light Enhanced Front Cover Glass(World First Coated Polycarbonate Front Cover)
- IR LED Temperature Feed back Circuit Advanced IR LED Protection.
- Accidental Surge and Shock Protector Built-in.
- Reverse Polarity Power Protection Circuit Built-in
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Easy First-Aid mechanism All of parts exchangeable easily by user (Including IR LED Board)

	ECG - 2042WT	
Image Sensor	1/3" SONY SUPER HAD High Resolution (410K Pixels.)	
H. Resolution/	NTSC/PAL – 480TVL(2:1 Interlaced)	
Scanning System	NTSC(525TVL): 768x494, PAL(625TVL): 752x582	
Min. Illumination	0.3Lux/F2.0 (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz, Vertical:59,94Hz	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 50dB(AGC Off)	
Gamma	r= 0.45	
White Balance	2,100°K – 9,600°K - Auto	
Gain Control	4dB – 32dB - Auto	
ID I ED Conshility	World First Visible 10mm Diameter (850nm, 20°) x 42ea	
IR LED Capability	1EA 5mm dia. IR LED x 2.2times = 1EA 10mm dia. IR LED	
Visibility Range	World longest 80Meter(Approx. 240Feet.)	
CDS Sensor	Digital MICOM IC controlled IR LED On/Off at 5 Lux	
Color / BW Control	True Color at Day time & True B/W at Night time	
Color / BW Control	TMIC ™ Controlled Color Signal Changeable.	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)	
Lens	STD Lens : f = 12.0mm IR Lens (AOV : 48°)	
Lens	8mm / 16mm	
MTBF	80,000 Hour (Easy Changeable IR LED 20,000 Hour)	
Power Source	DC12V 1A Regulated (Normal)	
rowel Soulce	DC7V - 32V TMIC ™ controlled	
Dimensions (WxHxD/mm)	82.0x 76.0 x 71.0 (w/Sunshield)	
Net Weight	650g (w/Sunshield)	



World First 10mm DIAMETER Visible IR LED



KEY FEATURES

ECG -5042WT

- World First Powerful 10mm Diameter Visible 850nm IR LED x 42ea Built-in (Visibility Range: Real 80M (Approx. 240Feet)
- 1/3" SONY SUPER HAD 480TVL High Resolution image Sensor Built-in (Min Illumination : 0.3lux(LED OFF))
- TMIC™ Triple Micom (Digital Micro Proccessor) IC Control System Built-in.
 - -True color at Day Time and True B/W at night time controlled by digital TMIC™ No Color Signal at Night!! Noise free!!
 - Accurate IR LED ON/OFF controlled by Digital TMIC™ No ghost effects or malfuntions at dawn, dusk or any twilight time
 - Stable electric current supply for IR LED controlled by Digital TMIC™ It make longer 3 times of IR LED's life!!
- ILCG™ IR LED Light Enhanced Front Cover Glass(World First Coated Polycarbonate Front Cover)
- IR LED Temperature Feed back Circuit Advanced IR LED Protection.
- Accidental Surge and Shock Protector Built-in.
- Reverse Polarity Power Protection Circuit Built-in
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Easy First-Aid mechanism All of parts exchangeable easily by user (Including IR LED Board)

	ECG - 5042WT	
Image Sensor	1/3" SONY SUPER HAD (320K Pixels.)	
H. Resolution/	NTSC/PAL – 420TVL(2:1 Interlaced)	
Scanning System	NTSC(525TVL): 512x492, PAL(625TVL): 500x582	
Min. Illumination	0.1Lux/F2.0 (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz, Vertical:59,94Hz	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 50dB(AGC Off)	
Gamma	r= 0.45	
White Balance	2,100°K - 9,600°K - Auto	
Gain Control	4dB – 32dB - Auto	
IR LED Capability	World First Visible 10mm Diameter (850nm, 15°) x 42ea	
IR LED Capability	1EA 5mm dia. IR LED x 2.2times = 1EA 10mm dia. IR LED	
Visibility Range	Real 80Meter(Approx. 240Feet.)	
CDS Sensor	Digital MICOM IC controlled IR LED On/Off at 3 Lux	
Color / BW Control	True Color at Day time & True B/W at Night time	
Color / BW Control	Digital MICOM IC controlled Color Signal Changeable	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)	
Lens	STD Lens : f = 12.0mm IR Lens (AOV : 48°)	
Lens	8mm / 16mm	
MTBF	20,000 Hour (Easy Changeable IR LED 20,000 Hour)	
Power Source	DC12V 1A Regulated (Normal)	
1 GWC1 GOUIGE	DC7V - 32V TMIC ™ controlled	
Dimensions (WxHxD/mm)	82.0x 76.0 x 71.0 (w/Sunshield)	
Net Weight	650g (w/Sunshield)	



Vandalproof Varifocal Bullet CAMERA



KEY FEATURES

ENG -5000V

- World First Powerful 10mm Diameter Visible 850nm IR LED x 42ea Built-in (Visibility Range: Real 80M (Approx. 240Feet)
- 1/3" SONY SUPER HAD 480TVL High Resolution image Sensor Built-in (Min Illumination : 0.3lux(LED OFF))
- TMIC™ Triple Micom (Digital Micro Proccessor) IC Control System Built-in.
 - -True color at Day Time and True B/W at night time controlled by digital TMIC™ No Color Signal at Night!! Noise free!!
 - Accurate IR LED ON/OFF controlled by Digital TMIC™ No ghost effects or malfuntions at dawn, dusk or any twilight time
 - Stable electric current supply for IR LED controlled by Digital TMIC™ It make longer 3 times of IR LED's life!!
- ILCG™ IR LED Light Enhanced Front Cover Glass(World First Coated Polycarbonate Front Cover)
- IR LED Temperature Feed back Circuit Advanced IR LED Protection.
- Accidental Surge and Shock Protector Built-in.
- Reverse Polarity Power Protection Circuit Built-in
- Robust Vandalproof & Weatherproof (IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- Easy First-Aid mechanism All of parts exchangeable easily by user (Including IR LED Board)

	ENG - 5000V	
Image Sensor	1/3" SONY SUPER HAD High Resolution (410K Pixels.)	
H. Resolution/	NTSC/PAL – 480TVL(2:1 Interlaced)	
Scanning System	NTSC(525TVL): 768x494, PAL(625TVL): 752x582	
Min. Illumination	0.3Lux/F2.0 (IR LED OFF)	
Scanning Frequency	Horizontal:15,734Hz, Vertical:59,94Hz	
Video output Level	1.0Vp-p (75ohms, Composite)	
S/N Ratio	More than 50dB(AGC Off)	
Gamma	r= 0.45	
White Balance	2,100°K – 9,600°K - Auto	
Gain Control	4dB – 32dB - Auto	
ID LED Canability	World First Visible 10mm Diameter (850nm, 20°) x 42ea	
IR LED Capability	1EA 5mm dia. IR LED x 2.2times = 1EA 10mm dia. IR LED	
Visibility Range	World longest 80Meter(Approx. 240Feet.)	
CDS Sensor	Digital MICOM IC controlled IR LED On/Off at 5 Lux	
Color / BW Control	True Color at Day time & True B/W at Night time	
Color / BW Control	TMIC ™ Controlled Color Signal Changeable.	
Operating Temperature (Humidity)	- 20°C - +60°C (10% - 95% RH)	
Lens	STD Lens : f = 12.0mm IR Lens (AOV : 48°)	
Lens	8mm / 16mm	
MTBF	80,000 Hour (Easy Changeable IR LED 20,000 Hour)	
Power Source	DC12V 1A Regulated (Normal)	
Fowel Source	DC7V - 32V TMIC ™ controlled	
Dimensions (WxHxD/mm)	82.0x 76.0 x 71.0 (w/Sunshield)	
Net Weight	6500g (w/Sunshield)	



Max. 300Feet Digitalized IR LED Illuminator



KEY FEATURES

EPL -2160D / 3160D

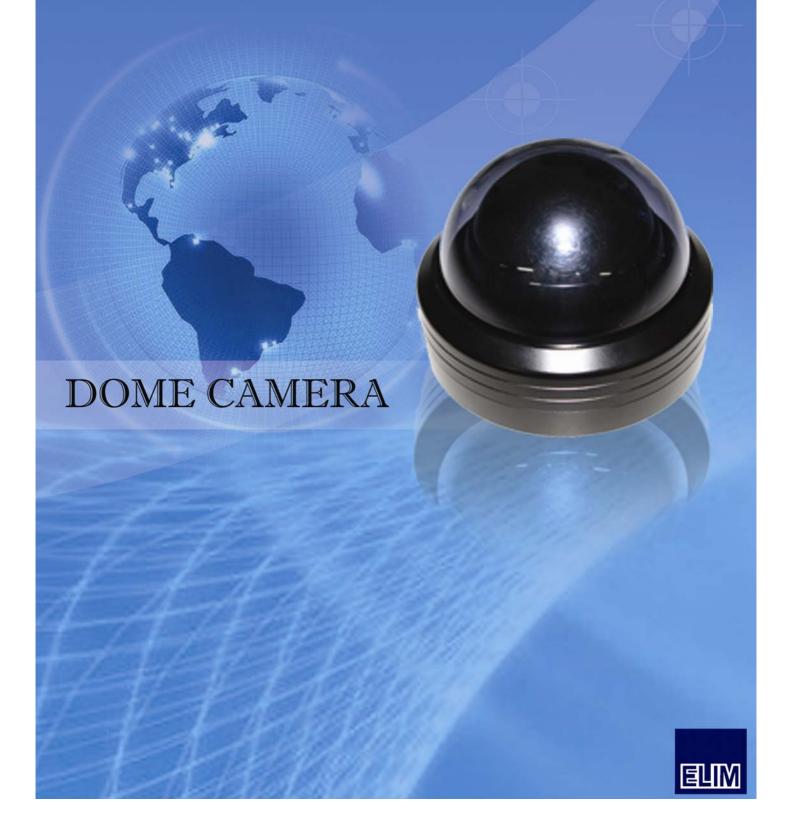
- World First 10mA Visible 850nm IR LED x 160ea Built-in
 (20 degree Visible Range: Real 100M (Approx. 300f) / 30 degree-Visibility Range: Real 80M(Approx. 240ft)
- Dynamic IR LED On/OFF controlled by Digitalized CDS Sensor
- Stable Electric current supply controlled by Digitalized mechanism
- ILCG™ IR LED Contrast filtered-Front Cover Glass (Manufacture by SCHOTT AG, Germany)
- No Fluorescent material, No dye Glass For long Range IR LED Light distance without any interference.
- IR LED CUT Filtered CDS Sensor Built-in-Sensoring all of spectrum precisely and automatically.
- IR LED Temperature Feed back Circuit- Advanced IR LED Protection through control electronic Current.
- Accidental Surge form air and Shock protector Built-in for stable application.
- Reverse Polarity Power protection Circuit built-in and extremely Low Power Consumption
- Robust vandalproof & Weatherproof(IP=67), Tamperproof & Rustproof Aluminum Casing for Outdoor.
- 12V DC/ 24V AC Dual power Automatic changing system (Non-polarity power connection)
- Extremely High Electronic voltage Tolerance level Min.8V-Max.19V for High performance
- Easy First-Aid mechanism- All of parts exchangeable easily by user (Including IR LED Board)
- Simultaneous effective operating with normal Day & Night Box camera (ex. D&N Cable Connection equipped model



	EPL-2160D / 3	160D	
IR LED Illumination Degree	EPL-2160D : visible IR LED 850nm, 20°		
(1PC)	EPL-3160D : visible IR LED 850nm, 30°		
No. of IR LED Channel		32 Channel	
On a wating at Command	100	mA MAX. per each cha	nnel
Operating Current	3 A	mp maximum (Includin	g all)
	EPL-2160D	Projection angle	33° Optimized
Visibility Page	EPL-2100D	Distance	100m(300ft) Optimized
Visibility Range	EPL-3160D	Projection angle	55° Optimized
	EPL-3100D	Distance	80m(240ft) Optimized
CDS Sensor	Digital MICOM IC Controlled IR LED On/Off at 5 Lux IR CUT Filtered/Coated Glass CDS Cap Built-in Aluminum Anti-Heating Treatment for cap Simultaneous Operating with Day &Night Camera (Option)		
SHOTT Glass thickness	IR LED Filtered Front Glass 3mm Thickness		
Operating Temperature	- 20°C - +60°C (10% - 95% RH)		
Operating remperature	IP Rat	ing = 67 (Perfect weath	erproof)
Maintenance -	MTTF	20.000 hour (Average OP Time)	
waintenance	MTBF	10,000 hour	
	DC 12V / 24v AC Dual power available (STD)		
Power Source	Power input	DC 12V 3 Amp Adapter (Transformer)	
Fower Source	Power DC Power Input : DC 12V (10%) Tolerance AC Power Input : AC 24V (10%)		: DC 12V (10%)
			: AC 24V (10%)
Dimensions (WxHxD/mm)	82.0 x 78.0 x 71.0 (w / Sunshield)		
Net Weight	650g (w / Sunshield)		



ELLIM continues to supply digiralized various surveillance system and high-performance security units which are equipped with the most sophisiticated technologies - most stable surveillance systems for most complicated security circumstances - for security of your life & property



1/3" SHARP MINI ALUMINUM VANDALPROOF DOME CAMERA



ELECTRONIC FEATURES

- 1/3" SHARP High Sensitive 380TVL/480TVL & STD/High Resolution image Sensor Built-in
- Remarkable color reproduction & high clear coloration
- Outstanding high Sensitivity picture quality under extreme low illumination
- All direction free adjustable Ball type camera built-in for easy installment.
- 70mm dia. Crystal clear polycarbonate dome cover for Vandal-Resistance
- Accidental Surge and Shock Protecting Circuit Built-in.
- Reverse Polarity Power Protection and Wide high-electric tolerance
- Extremely Low Power Consumption
- Strong working power tolerance(8V 20V DC)

MECHANIC FEATURES

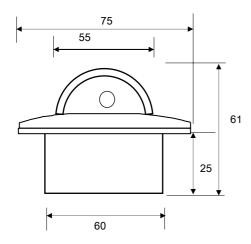
- Vandalproof, Weatherproof, Tamperproof with Free-moving Ball Bracket
- Anodized Aluminum Housing & Various Exchangeable Polycarbonate Cover
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy First-Aid Mechanism-All of parts exchangeable easily by User
- European Stylish design & Scratch-Proof coating
- *Internal/External Audio with C-Microphone "-50dB / mV " (Option)
- *Wall Mounting Bracket & Ceiling Mounting Bracket (Option)
- *Various Polycarbonate Colored-Circular Dome Cover exchangeable (Option)



MODEL	ECR-3270F	ECR-3370F	ECR-3470F	
Image Sensor	1/4 " SHARP STD Resolution	1/3 " SHARP STD Resolution	1/3 " SHARP High Resolution	
Effect Pixels	NTSC:512/(H)x492(V)	NTSC:512/(H)x492(V)	NTSC:768/(H)x494(V)	
Ellect Fixels	PAL:500(H)x582(V)	PAL:500(H)x582(V)	PAL:752(H)x582(V)	
Horizontal Resolution	380 TV Lines	380 TV Lines	480 TV Lines	
Synchronizing system		Internal		
Scanning system	NTSC :	525 Lines PAL: 625 Lines, 2:1	Interlaced	
Video output		1.0Vp-p Composite. 75 Ohms		
S/N Ratio	More than 46dB(AGC Off)	More than 48dB(AGC Off)	More than 48dB(AGC Off)	
Min. Illumination	0.5Lux at F2.0	0.5Lux at F2.0	0.3Lux at F2.0	
BLC		Automatic Control		
White Balance		2,500°K - 9100°K - Auto Tracing		
Gain Control		4dB – 35dB – Automatic Control		
Gamma correction	<i>r</i> = 0.45 or more			
Smear effect	0.005%			
Shutter aneed	NTSC: 1/60 ~ 1/100,000 sec			
Shutter speed	PAL : 1/50 ~ 1/100,000 sec			
MTTF	More than 60,000 hours			
Power Source	DC12V Regulated Preferred (Strong Power Tolerance : 8V DC – 20V DC)			
Operation current	80mA/Regulated 12V DC Preferred			
Lens Standard		3.6mm (92°)		
Option	2.9mn	2.9mm(120°), 4.3mm(78°), 6mm(54°), 8mm(39°)		
Operating Temperature	14 °F ~ 135° F (-10° C ~ +60° C)			
Humidity	Within 90% RH			
	2 Feet Shield Cable with			
Output Termination	RCA-Fe for Video, DC Jack for Power			
Output Termination	2 Feet Shield Cable with			
	BNC-Fe for Video, DC Jack for Power (STD)			
Measurement (mm)		88(Dia) x 82(H)		
Weight(Approx. g)				



Dimension(mm)

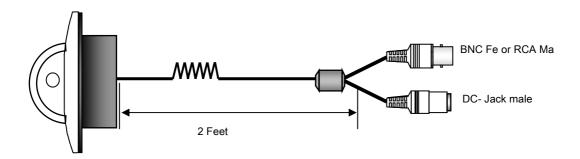


Connection & Cable

BNC-Fe/RCA-Ma, 2Feet(60cm) DIY Cable for Video / DC-Ma for DC Power

Option 1 : Internal/External Audio with C-Microphone " - 50dB / mV "

Option 2: Ceiling Mounting Bracket / Wall mounting Bracket Option 3: Extension Cable (60Feet (18m), 90Feet (30m))





1/3" SONY MINI ALUMINUM VANDALPROOF DOME CAMERA



ELECTRONIC FEATURES

- 1/3" SONY SUPER HAD 420TVL/480TVL & STD/High Resolution image Sensor Built-in
- Remarkable color reproduction & high clear coloration
- Outstanding high Sensitivity picture quality under extreme low illumination
- All direction free adjustable Ball type camera built-in for easy installment.
- 70mm dia. Crystal clear polycarbonate dome cover for Vandal-Resistance
- Accidental Surge and Shock Protecting Circuit Built-in
- Reverse Polarity Power Protection and Wide high-electric tolerance
- Extremely Low Power Consumption & Wide working Dual power tolerance

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with Free-moving Ball Bracket
- Anodized Aluminum Housing & Various Exchangeable Polycarbonate Cover
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy First-Aid Mechanism-All of parts exchangeable easily by User
- European Stylish design & Scratch-Proof coating



^{*}Internal/External Audio with C-Microphone "-50dB / mV " (Option)

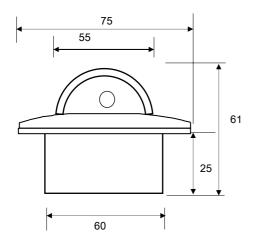
^{*}Wall Mounting Bracket & Ceiling Mounting Bracket (Option)

^{*}Various Polycarbonate Colored-Circular Dome Cover exchangeable (Option)

MODEL	ECR-2070F	ECR-5070F	
Image Sensor	1/3 " Super HAD Color CCD, SONY	1/3 " Super HAD Color CCD, SONY	
Effect Division	NTSC: 768(H)x494(V)	NTSC: 512(H)x492(V)	
Effect Pixels	PAL: 752(H)x582(V)	PAL: 500(H)x582(V)	
Horizontal Resolution	480 TV Lines	420 TV Lines	
Synchronizing system	Internal	internal	
Scanning system	NTSC : 525 Lines PAL :	625 Lines, 2:1 Interlaced	
Video output	1.0Vp-p Composite. 75 Ohms	1.0Vp-p Composite. 75 Ohms	
S/N Ratio	More than 48dB(AGC Off)	More than 48dB(AGC Off)	
Min. Illumination	0.3Lux at F2.0	0.1Lux at F2.0	
BLC	Automatic Control	Automatic	
White Balance	2,500°K – 9,500°K - Auto Tracing	2,500°K – 9,500°K - Auto Tracing	
Gain Control	4dB – 35dB Auto	4dB – 35dB Auto	
Gamma correction	r = 0.45	r=0.45	
Smear effect	0.005%	0.005%	
	NTSC : 1/60 ~ 1/100,000 sec	NTSC : 1/60 ~ 1/100,000 sec	
Shutter speed	PAL: 1/50 ~ 1/100,000 sec	PAL : 1/50 ~ 1/100,000 sec	
MTTF	80,000 hours	80,000 hours	
Power Source	DC12V (Voltage Tolerance : 9V – 18V)	DC12V (Voltage Tolerance : 9V – 18V)	
Operation current	110mA w/Regulated 12V DC	90mA w/Regulated 12V DC	
Lens Standard	3.6mm (92°)	3.6mm (92°)	
-Exchangeable Lens	2.9mm(120°),4.3mm(78°),6mm(54°),8mm(39°)	2.9mm(120°),4.3mm(78°),6mm(54°),8mm(39°)	
Operating Temperature	14 °F ~ 135° F (-10° C ~ +60° C)	14 °F ~ 135° F (-10° C ~ +60° C)	
Humidity	Within 90% RH	Within 90% RH	
	2 Feet Shield Cable with	2 Feet Shield Cable with	
Output Termination	RCA-Fe for Video, DC Jack for Power	RCA-Fe for Video, DC Jack for Power	
	2 Feet Shield Cable with	2 Feet Shield Cable with	
	BNC-Fe for Video, DC Jack for Power (STD)	BNC-Fe for Video, DC Jack for Power (STD)	
Measurement (mm)	75(Dia) x 61(H)	75(Dia) x 61(H)	
Weight(Approx. g)	Approx. 320g	Approx. 320g	



Dimension(mm)

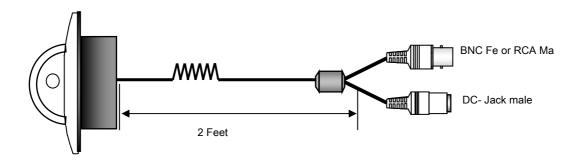


Connection & Cable

BNC-Fe/RCA-Ma, 2Feet(60cm) DIY Cable for Video / DC-Ma for DC Power

Option 1 : Internal/External Audio with C-Microphone " - 50dB / mV "

Option 2: Ceiling Mounting Bracket / Wall mounting Bracket Option 3: Extension Cable (60Feet (18m), 90Feet (30m))





1/3" SHARP MIDIUM ALUMINUM VANDALPROOF DOME CAMERA



© ELECTRONIC FEATURES

- 1/3" SHARP high Sensitive 380TVL/480TVL & STD/High Resolution image Sensor Built-in
- Remarkable color reproduction & high clear coloration
- Outstanding high Sensitivity picture quality under extreme low illumination
- All direction free adjustable Ball type camera built-in for easy installment.
- 70mm dia. Crystal clear polycarbonate dome cover for Vandal-Resistance
- Accidental Surge and Shock Protecting Circuit Built-in
- Reverse Polarity Power Protection and Wide high-electric tolerance
- Extremely Low Power Consumption & Wide working Dual power tolerance

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with Free-moving Ball Bracket
- Anodized Aluminum Housing & Various Exchangeable Polycarbonate Cover
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy First-Aid Mechanism-All of parts exchangeable easily by User
- Circular diffused reflection free mechanism (Patent)

*Internal/External Audio (5mm dia. 45dB Max.) Available (Option)

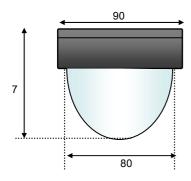
*IR Sensitive Lens & Filter Available (Option)

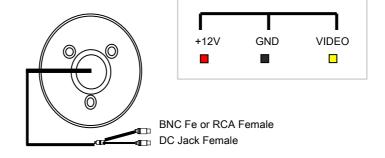


MODEL		ECR-3380ST	ECR-3480ST	
Image Sensor Format		1/3 " SHARP High Sensitive & New 6032 Chipset Version		
Effect Pixels		NTSC(525TVL): 512(H)x492(V)	NTSC(525TVL): 768(H)x494(V)	
		PAL(625TVL): 500(H)x582(V)	PAL(625TVL): 752(H)x582(V)	
Horizontal Resolution		380 TV Lines (NTSC:270K Pixel,PAL:320KPixel)	480 TV Lines (NTSC:410K Pixel,PAL:470KPixel)	
Synchronizing system		Internal (Interlaced for DVR Recording)		
Scanning system		NTSC: 525 Lines PAL: 625 Lines, 2:1 Interlaced		
Video output		1.0Vp-p Composite. 75 Ohms		
S/N Ratio		More than 48dB(AGC Off)		
Min. Illumination		0.3Lux at F2.0	0.5Lux at F2.0	
BLC		Automatic (ON/OFF)		
Shutter speed		NTSC: 1/60 ~ 1/100,000 sec PAL: 1/50 ~ 1/100,000 sec		
Gamma correction		r = 0.45		
White Balance		2,100°K – 8,500°K Auto		
Gain Control		4dB – 35dB Auto (Max/Off)		
Smear effect		0.005%		
MTTF		80,000 hours		
Power Source		DC12V Regulated (Strong Voltage Tolerance : 8V ~ 19V)		
Operation current		DC12V -80mA, w/Regulated Power input	DC12V -80mA, w/Regulated Power input	
Lens	Standard	3.6mm Lens/F2.0		
	Option	Fixed : 2.5mm, 2.9mm, 4.3mm, 6.0mm, 8.0mm, 12mm, 16mm		
Operating Temperature		14 °F ~ 122° F (-10° C ~ +50° C)		
Humidity		Within 90% RH (IP Rating : IP=66)		
Output Termination		2 Feet DIY cable with BNC-Fe for Video, Terminal block for Power (STD)		
Measurement (mm)		75(Dia) x 61(H)	75(Dia) x 61(H)	
Weight(Approx. g)		380g		



Dimension(mm)





Body Color

- Black
- White
- Raw Silver

1/3" SHARP MIDIUM ALUMINUM VANDALPROOF DOME CAMERA



ELECTRONIC FEATURES

- 1/3" SHARP high Sensitive 380TVL/480TVL & STD/High Resolution image Sensor Built-in
- Remarkable color reproduction & high clear coloration
- Outstanding high Sensitivity picture quality under extreme low illumination
- All direction free adjustable Ball type camera built-in for easy installment.
- 80mm dia. Crystal clear polycarbonate dome cover for Vandal-Resistance
- Accidental Surge and Shock Protecting Circuit Built-in
- Reverse Polarity Power Protection and Wide high-electric tolerance
- Perfect High & low illuminance Picture quality without any random noise
- Extremely Low Power Consumption & Wide working Dual power tolerance

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with Free-moving Ball Bracket
- Robust Aluminum Housing & Topped Polycarbonate Clear Cover Built-in
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy First-Aid Mechanism-All of parts exchangeable easily by User
- Circular diffused reflection free mechanism (Patent)

*Internal/External Audio (5mm dia. 45dB Max.) Available (Option)

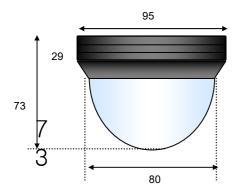
*IR Sensitive Lens & Filter Available (Option)

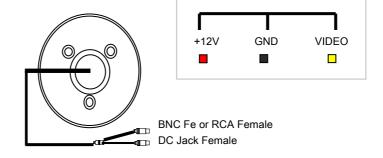


MODEL		ECR-3395ST	ECR-3495ST	
Image Sensor Format		1/3 " SHARP High Sensitive & New 6032 Chipset Version		
Effect Pixels		NTSC(525TVL): 512(H)x492(V)	NTSC(525TVL): 768(H)x494(V)	
		PAL(625TVL): 500(H)x582(V)	PAL(625TVL): 752(H)x582(V)	
Horizontal Resolution		380 TV Lines (NTSC:270K Pixel,PAL:320KPixel)	480 TV Lines (NTSC:410K Pixel,PAL:470KPixel)	
Synchronizing system		Internal (Interlaced for DVR Recording)		
Scanning system		NTSC : 525 Lines PAL : 625 Lines, 2:1 Interlaced		
Video output		1.0Vp-p Composite. 75 Ohms		
S/N Ratio		More than 48dB(AGC Off)		
Min. Illumination		0.3Lux at F2.0	0.5Lux at F2.0	
BLC		Automatic (ON/OFF)		
Shutter speed		NTSC : 1/60 ~ 1/100,000 sec PAL : 1/50 ~ 1/100,000 sec		
Gamma correction		r = 0.45		
White Balance		2,100°K – 8,500°K Auto		
Gain Control		4dB – 30dB Auto (Max/Off)		
Smear effect		0.005%		
MTTF		80,000 hours		
Power Source		DC12V Regulated (Strong Voltage Tolerance : 8V ~ 19V)		
Operati	ion current	DC12V -80mA, w/Regulated Power input	DC12V -80mA, w/Regulated Power input	
	Standard	3.6mm Lens/F2.0		
Lens	Option	Fixed : 2.5mm, 2.9mm, 4.3mm, 6.0mm, 8.0mm, 12mm, 16mm		
Operating Temperature		14 °F ~ 122° F (-10° C ~ +50° C)		
Humidity		Within 90% RH (IP Rating : IP=66)		
Output Termination		2 Feet DIY cable with BNC-Fe for Video, Terminal block for Power (STD)		
Weight (Approx. g)		380g		



Dimension(mm)





Body Color

- Black
- White
- Raw Silver

1/3" SHARP ALUMINUM VANDALPROOF 3AXIS DOME CAMERA



ELECTRONIC FEATURES

- 1/3" SHARP high Sensitive 380TVL/480TVL & STD/High Resolution image Sensor
- Digitalized Remarkable color reproduction & high clear coloration like Human eye
- Outstanding high Sensitivity picture quality under extremely Low illumination
- External RCA Fe Extra Connector Built-in for correct installment & preview (Patent)
- External Control DIP S/W Built-in on outer panel for correct picture control.
 ALC/BLC/AGC/FL (All Model are equipped same function)
- Accidental Surge and Shock Protecting Built-in
- Reverse Polarity Power Protection and extremley high-electric tolerance
- Extremely Low Power Consumption & Wide working power tolerance (DC8V-19V)

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with robust 3Axis Inner Bracket built-in
- Robust Aluminum Housing & Topped Polycarbonate Clear Cover Built-in
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy install mechanism & Easy exchange various lens mountable
- Circular diffused reflection free mechanism

*Internal/External Audio (5mm dia. 45dB Max.) Available (Option)

*IR Sensitive Lens & Filter Available (Option)



	MODEL	ECR-3300V (ECR-3300VD)	ECR-3400V (ECR-3400VD)
Image Sensor Format		1/3 " SHARP High Sensitive &	& New 6032 Chipset Version
Effect Pixels		NTSC(525TVL): 512(H)x492(V)	NTSC(525TVL): 768(H)x494(V)
		PAL(625TVL): 500(H)x582(V)	PAL(625TVL): 752(H)x582(V)
Horizo	ntal Resolution	380 TV Lines (NTSC:270K Pixel,PAL:320KPixel)	480 TV Lines (NTSC:410K Pixel,PAL:470KPixel)
Synchro	onizing system	Internal (Interlaced f	or DVR Recording)
Scannii	ng system	NTSC : 525 Lines PAL : 6	625 Lines, 2:1 Interlaced
Video c	output	1.0Vp-p Compo	site. 75 Ohms
S/N Ra	tio	More than 48	dB(AGC Off)
Min. IIIu	umination	0.1Lux at F1.6	0.1Lux at F1.6
BLC		Automatic	(ON/OFF)
Shutter	speed	NTSC : 1/60 ~ 1/100,000 sec PAL : 1/50 ~ 1/100,000 sec	
Gamma	a correction	r = 0.45	
White E	Balance	2,100°K – 8,500°K Auto	
Gain C	ontrol	4dB – 30dB Auto (Max/Off)	
Smear	effect	0.005%	
MTTF		80,000 hours	
Power	Source	DC12V Regulated (Stro	ng Voltage : 8V ~ 19V)
Operati	ion current	DC12V -80mA, w/Regulated Power input	DC12V -80mA, w/Regulated Power input
	Standard	4-9mm Manual Iris Lens/F1.6	
Lens	Option	Fixed: 2.5mm, 2.9mm, 4.3mm, 6.0mm, 8.0mm, 12mm, 16mm	
Operati	ing Temperature	14 °F ~ 122° F (-	10° C ~ +50° C)
Humidit	ty	Within 90% RH (IP Rating : IP=66)	
Output	Termination	2 Feet DIY cable with BNC-Fe for Video, Terminal block for Power (STD)	
Weight	(Approx. g)	750	Эg



Dome CAMERA

1/3" SHARP ALUMINUM VANDALPROOF 3AXIS DOME CAMERA



D ELECTRONIC FEATURES

- High-class Visible 850nm IR LEDx28ea and Anti-IR LED Light Cut Flim Coated CDS Sensor Built-in
- 1/3" SHARP high Sensitive 380TVL/480TVL & STD/High Resolution image Sensor
- Digitalized Remarkable color reproduction & high clear coloration like Human eye
- Outstanding high Sensitivity picture quality under extremely Low illumination
- External RCA Fe Extra Connector Built-in for easy install & preview (Patent)
- External Control DIP S/W Built-in on outer panel for correct picture control.
 ALC_ESC/BLC On-Off/AGC On-Off/FL On-Off (Dual Power Model: INT./Linelock)
- Natural Color at Day Time & vivid b/W at Night time controlled by DSP
- Accurate IR LED ON/OFF controlled with long-life
- Stable Electric current supply for IR LED Protection
- IR LED Temperature Feed back Circuit Advanced IR LED Protection.
- Accidental Surge and Shock Protecting Built-in
- Reverse Polarity Power Protection and extremley high-electric tolerance
- Extremely Low Power Consumption & Wide working power tolerance (DC8V-19V)

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with robust 3Axis Inner Bracket built-in
- Robust Aluminum Housing & Topped Polycarbonate Clear Cover Built-in
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy First-Aid mechanism All of parts exchangeable easily by user
- Circular diffused reflection free mechanism (patent)



	MODEL	ECR-3328LT	ECR-3335LVT	
Image S	Sensor Format	1/3 " SHARP High Sensitive &	& New 6032 Chipset Version	
Effect Pixels		NTSC(525TVL): 512(H)x492(V)	NTSC(525TVL): 768(H)x494(V)	
		PAL(625TVL): 500(H)x582(V)	PAL(625TVL): 752(H)x582(V)	
Horizontal Resolution		380 TV Lines (NTSC:270K Pixel,PAL:320KPixel)	480 TV Lines (NTSC:410K Pixel,PAL:470KPixel)	
Synchro	onizing system	Internal (Interlaced f	or DVR Recording)	
Scannin	ng system	NTSC : 525 Lines PAL : 6	625 Lines, 2:1 Interlaced	
Video o	utput	1.0Vp-p Compo	site. 75 Ohms	
S/N Rat	tio	More than 48	dB(AGC Off)	
Min. Illu	mination	0.1Lux at F1.6	0.1Lux at F1.6	
IR LED	Visibility Range	Visible IR LED 850nm, 60degreex28ea	a(35ea), 30m(Approximately : 90Feet)	
IR LED	Control	MICOM IC Circuit Control – TMIC ™		
IR LED	On/Off	CDS Sensor controlled by micom IC, 3-4 Lux IR LED On/Off		
BLC		Automatic (ON/OFF)		
Shutter	speed	NTSC : 1/60 ~ 1/100,000 sec PAL : 1/50 ~ 1/100,000 sec		
Gamma	correction	r = 0.45		
White B	alance	2,100°K – 8,5	600°K Auto	
Gain Co	ontrol	4dB – 30dB Auto (Max/Off)		
Smear e	effect	0.005%		
MTTF		80,000 hours		
Power S	Source	DC12V Regulated (Stro	ng Voltage : 8V ~ 19V)	
Operation	on current	DC12V -250mA, w/Regulated Power input	DC12V -300mA, w/Regulated Power input	
	Standard	3.6mm IR Lens/F1.6	4-9mm Manual Iris Lens/F1.6	
Lens	Option	Fixed: 2.9mm, 4.3mm, 6.0mm, 8.0mm, 12mm, 1	6mm/Vrifocal: 2.6mm Auto DC/Manual Iris Lens	
Operation	ng Temperature	14 °F ~ 122° F (-	-10° C ~ +50° C)	
Humidit	у	Within 90% RH (II	P Rating : IP=66)	
Output ⁻	Termination	2 Feet DIY cable with BNC-Fe for Video, Terminal block for Power (STD)		
Weight	(Approx. g)	720g / 780g		



Dome CAMERA

1/3" SONY MINI ALUMINUM VANDALPROOF DOME CAMERA



ELECTRONIC FEATURES

- 1/3" SONY SUPER HAD 420TVL/480TVL & STD/High Resolution image Sensor Built-in
- Remarkable color reproduction & high clear coloration
- Outstanding high Sensitivity picture quality under extreme low illumination
- All direction free adjustable Ball type camera built-in for easy installment.
- 70mm dia. Crystal clear polycarbonate dome cover for Vandal-Resistance
- Accidental Surge and Shock Protecting Circuit Built-in
- Reverse Polarity Power Protection and Wide high-electric tolerance
- Extremely Low Power Consumption & Wide working Dual power tolerance

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with Free-moving Ball Bracket
- Anodized Aluminum Housing & Various Exchangeable Polycarbonate Cover
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy First-Aid Mechanism-All of parts exchangeable easily by User
- European Stylish design & Scratch-Proof coating



^{*}Internal/External Audio with C-Microphone "-50dB / mV " (Option)

^{*}Wall Mounting Bracket & Ceiling Mounting Bracket (Option)

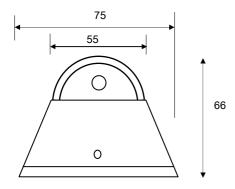
^{*}Various Polycarbonate Colored-Circular Dome Cover exchangeable (Option)

MODEL	ECR-2070S	ECR-5070S
Image Sensor	1/3 " Super HAD Color CCD, SONY	1/3 " Super HAD Color CCD, SONY
Effect Divole	NTSC: 768(H)x494(V)	NTSC: 512(H)x492(V)
Effect Pixels	PAL: 752(H)x582(V)	PAL: 500(H)x582(V)
Horizontal Resolution	480 TV Lines	420 TV Lines
Synchronizing system	Internal	internal
Scanning system	NTSC : 525 Lines PAL :	625 Lines, 2:1 Interlaced
Video output	1.0Vp-p Composite. 75 Ohms	1.0Vp-p Composite. 75 Ohms
S/N Ratio	More than 48dB(AGC Off)	More than 48dB(AGC Off)
Min. Illumination	0.3Lux at F2.0	0.1Lux at F2.0
BLC	Automatic Control	Automatic
White Balance	2,500°K – 9,600°K - Auto Tracing	2,500°K – 9,600°K - Auto Tracing
Gain Control	4dB – 35dB Auto	4dB – 35dB Auto
Gamma correction	r = 0.45	r = 0.45
Smear effect	0.005%	0.005%
	NTSC : 1/60 ~ 1/100,000 sec	NTSC : 1/60 ~ 1/100,000 sec
Shutter speed	PAL : 1/50 ~ 1/100,000 sec	PAL : 1/50 ~ 1/100,000 sec
MTTF	80,000 hours	80,000 hours
Power Source	DC12V (9- 15V)	DC12V (9-15V)
Operation current	110mA w/Regulated 12V DC	90mA w/Regulated 12V DC
Lens Standard	3.6mm (92°)	3.6mm (92°)
-Exchangeable Lens	2.9mm(120°),4.3mm(78°),6mm(54°),8mm(39°)	2.9mm(120°),4.3mm(78°),6mm(54°),8mm(39°)
Operating Temperature	14 °F ~ 135° F (-10° C ~ +60° C)	14 °F ~ 135° F (-10° C ~ +60° C)
Humidity	Within 90% RH	Within 90% RH
	2 Feet Shield Cable with	2 Feet Shield Cable with
Outrout Townsia ation	RCA-Fe for Video, DC Jack for Power	RCA-Fe for Video, DC Jack for Power
Output Termination	2 Feet Shield Cable with	2 Feet Shield Cable with
	BNC-Fe for Video, DC Jack for Power (STD)	BNC-Fe for Video, DC Jack for Power (STD)
Measurement (mm)	75(Dia) x 61(H)	75(Dia) x 61(H)
Weight(Approx. g)	Approx. 320g	Approx. 320g



Dome CAMERA

Dimension(mm)

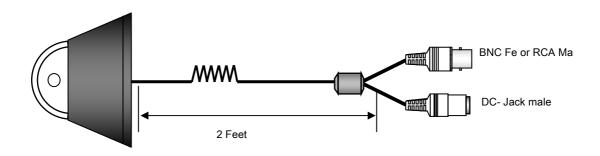


Connection & Cable

BNC-Fe/RCA-Ma, 2Feet(60cm) DIY Cable for Video / DC-Ma for DC Power

Option 1 : Internal/External Audio with C-Microphone " - 50dB / mV "

Option 2: Ceiling Mounting Bracket / Wall mounting Bracket Option 3: Extension Cable (60Feet (18m), 90Feet (30m))





Dome CAMERA

1/3" SHARP MINI ALUMINUM VANDALPROOF DOME CAMERA



ELECTRONIC FEATURES

- 1/3" SHARP High Sensitive 380TVL/480TVL & STD/High Resolution image Sensor Built-in
- Remarkable color reproduction & high clear coloration
- Outstanding high Sensitivity picture quality under extreme low illumination
- All direction free adjustable Ball type camera built-in for easy installment.
- 70mm dia. Crystal clear polycarbonate dome cover for Vandal-Resistance
- Accidental Surge and Shock Protecting Circuit Built-in
- Reverse Polarity Power Protection and Wide high-electric tolerance
- Extremely Low Power Consumption & Wide working Dual power tolerance

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with Free-moving Ball Bracket
- Anodized Aluminum Housing & Various Exchangeable Polycarbonate Cover
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy First-Aid Mechanism-All of parts exchangeable easily by User
- European Stylish design & Scratch-Proof coating



^{*}Internal/External Audio with C-Microphone "-50dB / mV " (Option)

^{*}Wall Mounting Bracket & Ceiling Mounting Bracket (Option)

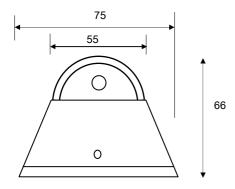
^{*}Various Polycarbonate Colored-Circular Dome Cover exchangeable (Option)

MODEL	ECR-3270S	ECR-3370S	ECR-3470S	
Image Sensor	1/4 " SHARP STD Resolution	1/3 " SHARP STD Resolution	1/3 " SHARP High Resolution	
Effect Pixels	NTSC:512/(H)x492(V)	NTSC:512/(H)x492(V)	NTSC:768/(H)x494(V)	
Lifect Fixels	PAL:500(H)x582(V)	PAL:500(H)x582(V)	PAL:752(H)x582(V)	
Horizontal Resolution	380 TV Lines	380 TV Lines	480 TV Lines	
Synchronizing system		Internal		
Scanning system	NTSC:	525 Lines PAL : 625 Lines, 2:1	Interlaced	
Video output		1.0Vp-p Composite. 75 Ohms		
S/N Ratio	More than 46dB(AGC Off)	More than 48dB(AGC Off)	More than 48dB(AGC Off)	
Min. Illumination	0.5Lux at F2.0	0.5Lux at F2.0	0.3Lux at F2.0	
BLC		Automatic Control		
White Balance		2,500°K - 9100°K - Auto Tracing	1	
Gain Control		4dB – 35dB – Automatic Control		
Gamma correction	r = 0.45			
Smear effect	0.005%			
Shutter apped	NTSC : 1/60 ~ 1/100,000 sec			
Shutter speed	PAL : 1/50 ~ 1/100,000 sec			
MTTF	More than 60,000 hours			
Power Source		DC12V (9 - 20V)		
Operation current		90mA/Regulated 12V DC Preferre	ed	
Lens Standard		3.6mm (92°)		
Option	2.9mn	n(120°), 4.3mm(78°), 6mm(54°), 8r	mm(39°)	
Operating Temperature		14 °F ~ 135° F (-10° C ~ +60° C		
Humidity		Within 90% RH		
		2 Feet Shield Cable with		
Output Termination	RCA-Fe for Video, DC Jack for Power			
Output Termination		2 Feet Shield Cable with		
	BNC	-Fe for Video, DC Jack for Power	(STD)	
Measurement (mm)		88(Dia) x 82(H)		
Weight (Approx. g)				



Dome CAMERA

Dimension(mm)

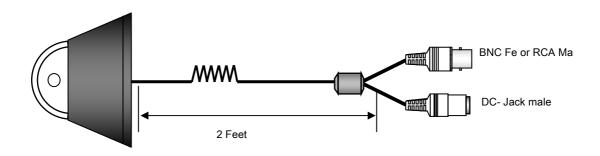


Connection & Cable

BNC-Fe/RCA-Ma, 2Feet(60cm) DIY Cable for Video / DC-Ma for DC Power

Option 1 : Internal/External Audio with C-Microphone " - 50dB / mV "

Option 2: Ceiling Mounting Bracket / Wall mounting Bracket Option 3: Extension Cable (60Feet (18m), 90Feet (30m))





Dome CAMERA

1/3" SONY ALUMINUM VANDALPROOF 3AXIS DOME CAMERA



D ELECTRONIC FEATURES

- 1/3" SONY high Sensitive 520TVL High Resolution image Sensor
- Digitalized Remarkable color reproduction & high clear coloration like Human eye
- Outstanding high Sensitivity picture quality under extremely Low illumination
- External RCA Fe Extra Connector Built-in for correct installment & preview (Patent)
- External Control DIP S/W Built-in on outer panel for correct picture control.
 ALC/BLC/AGC/FL (All Model are equipped same function)
- Accidental Surge and Shock Protecting Built-in
- Reverse Polarity Power Protection and extremely high-electric tolerance
- Extremely Low Power Consumption & Wide working power tolerance (DC9V-16V)

MECHANIC FEATURES

- Vandalproof, Weatherproof, Tamperproof with robust 3Axis Inner Bracket built-in
- Robust Aluminum Housing & Topped Polycarbonate Clear Cover Built-in
- Weatherproof (IP=66) for installing universal applications at Indoor/Outdoor
- Easy install mechanism & Easy exchange various lens mountable
- Circular diffused reflection free mechanism

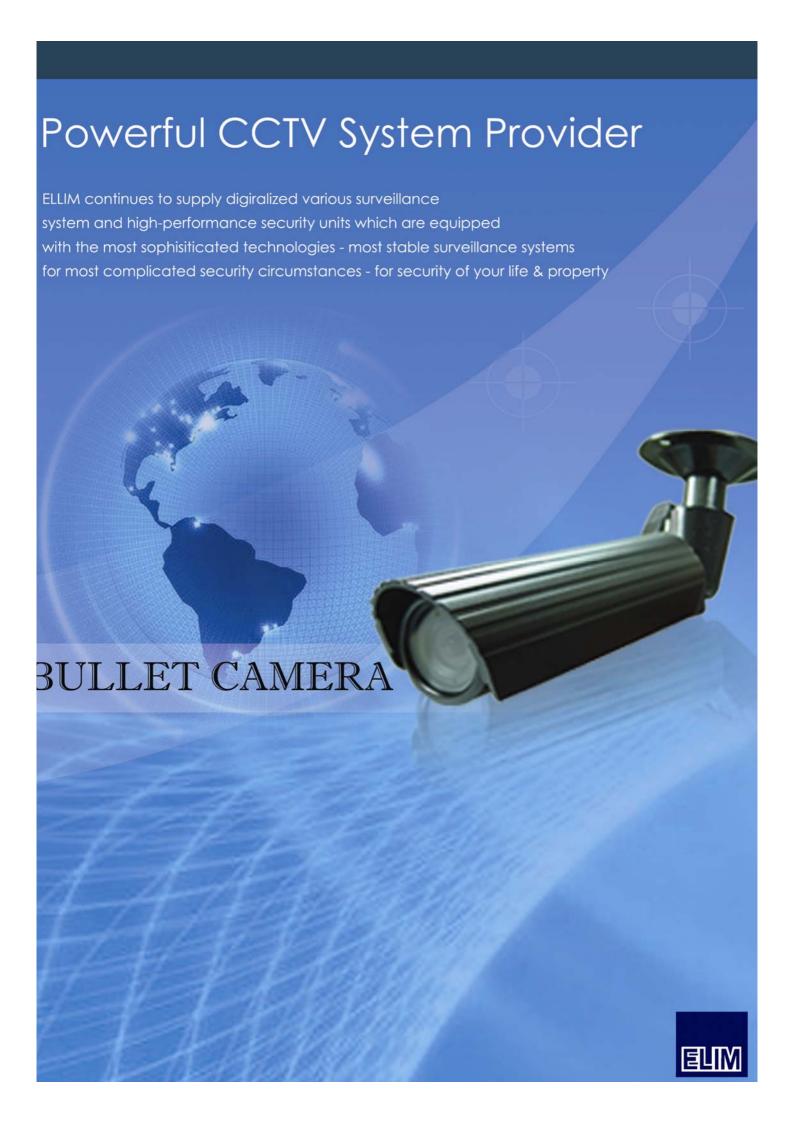
*Internal/External Audio (5mm dia. 48dB Max.) Available (Option)

*IR Sensitive Lens & Filter Available (Option)



	MODEL			ECR – 2	2200ST
Main Chip Set				Sony DSP (SS - HQ1)
Image Sensor		Sony – 1/3Inch Sup	er HAD Color CC	D	Sony – 1/3Inch Super HAD Color CCD
Effectiv	e pixels	768 (Horizontal) x 4	94 (Vertical)		752 (Horizontal) x 582 (Vertical)
Video S	ystem	NTSC TV System			PAL TV System
Scannin	g system		NTSC : 525	Lines PAL:6	S25 Lines, 2:1 Interlaced
Scannin	g Frequency	15.734 [KHZ]/H	59.94 [HZ]/V		15.625 [KHZ]/H 50 [HZ]/V
Shutter	speed	1/60 ~ 1/100,000 se	ec		1/60 ~ 1/100,000 sec
Sync sy	stem			Internal	Sync
H - Reso	olution			520 TV	Lines
S/N Ra	tio	48 [dB] / AGC Off			
Minimum Illumination		0.1 Lux (F : 2.0 / 30 IRE)			
Gamma		0.45 Approx			
CCD Le	vel Control	ELC / ALC			
AGC Ga	ain Control			Automatic (0 ~ 18dB)
White B	alance			Automatic Wh	nite Balance
C. Video	Output	VBS 1.0 V	VBS 1.0 Vp-p / 75 ohm Video : 0.7 Vp-p / Sync : 0.3Vp-p / Burst : 0.3Vp-p		Vp-p / Sync : 0.3Vp-p / Burst : 0.3Vp-p
Input Vo	oltage	DC 9V ~ 16V			
Current		Max : 180mA +/- 10mA (at 12VDC)			
Operatir	ng Temp	- 20 ° C ~ +50° C			
Dimentio	ons	32mm x 32mm (Two – Board)			
Onting		DC Auto Iris Lens			
Option				Aud	lio
Lens	Standard			3.6mm box	ard Lens
LUIS	Option	4-9mm manual Iris Lens / F 1.6		ris Lens / F 1.6	
Dip Swit	tch	BLC / Flicker on - off			





Weatherproof (IP=67) 21mm dia. 1/3" SONY Bullet CAMERA

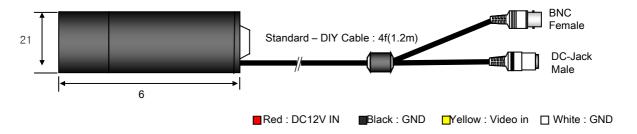


© KEY FEATURES

- Excellent picture quality at low sensitivity.
- Supreme True Color reproduction & clearest picture quality
- Professional features & functions
- Crystal clear front cover & perfect moisture-resistant structure
- Easy various lens changing & mounting as different viewable distance
- Beautiful design & compact hand-grip size for various user's application
- Easy & robust installation.
- Extremely Low Power Consumption & wide working voltage tolerance
- Accidental Surge from air and Shock Protection circuits Built-in
- *Audio Available (option), Sun Shield / Metal Hood (Option)
- *IR Sensitivity Lens available (Option)

Dimension(mm) & Wiring

World Smallest 1/3" SONY 480TVL EX-VIEW CAMERA





MOE	DEL(21mm dia.)	ECB-2021WT	ECB-7021WST	
Image Sensor		1/3" Super Had CCD SONY STD Resolution	1/3" EX-VIEW CCD SONY High Resolution	
Effective P	ixels	512(H) x492(V) :NTSC, 500(H) x582(V):PAL	768(H) x 492(V) :NTSC, 752(H) x 582(V):PAL	
H. Resolut	ion	480 TV Lines	480TV Lines	
Synchroniz	zing system	Inte	ernal	
Scanning s	system	NTSC 525 Lines PAL	625 Lines 2:1 Interlaced	
Video outp	ut	1.0Vp-p Comp	osite. 75 Ohms	
S/N ratio		More then 50	dB (AGC Off)	
Min. Illumir	nation	0.1Lux	0.01Lux at	
BLC (Back Light compensation)		Auto	matic	
Shutter Speed		NTSC : 1/60 ~ 1/100,000 sec	PAL : 1/50 ~ 1/100,000 sec	
Gamma correction		r= 0.45 , Automatic		
White Bala	ince	2500°K ~ 9500°K Auto		
Gain contro	ol	4dB ~ 32dB Auto		
Smear Effe	ect	0.005%		
MTTF		80,000hours		
Power sou	rce	DC 12V (Voltage Tolerance : 8V ~ 20V DC)		
Operating	current	90mA w/regulated power input		
Lens	Standard	STD : f=3.6mm (92°)		
Lens	Option	2.9mm, 4.3mm, 6.0mm, 8.0mm, 12mm, 16mm Easy Exchangeable		
Output terr	minal	4 Feet DIY cable with BNC-Female for Video, DC Jack-Male for Power (STD)		
Operating	Temperature	14°F ~ 144°F (-10° C ~ +60° C)	
Humidity		Within 95% RH (IP Rating = 67, Weatherproof)		
Measurement (mm)		68mm	x 21mm	
Weight (Approx.g)		9	1g	
	IR Sensitivity Lens	Yes	Yes	
Optional Features	Audio	Yes	Yes	
realures	Hood (Sunshield)	Yes (Groove Type / Flat Type)	Yes (Groove Type / Flat Type)	



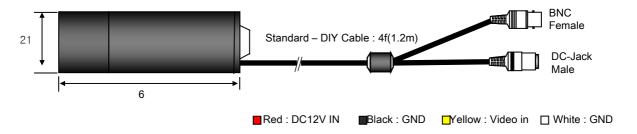
Weatherproof (IP=67) 21mm dia. 1/3" SHARP Bullet CAMERA

© KEY FEATURES

- Excellent picture quality at low sensitivity.
- Supreme True Color reproduction & clearest picture quality
- Professional features & Superior functions
- Crystal clear front cover & perfect moisture-resistant structure
- Easy various lens changing & mounting as different viewable distance
- Beautiful design & compact hand-grip size for various user's application
- Easy & robust installation.
- Extremely Low Power Consumption & wide working voltage tolerance
- Accidental Surge from air and Shock Protector circuits Built-in
- Reverse Polarity protection built in
- *Audio Available (option)
- *IR Sensitivity Lens available (Option)

Dimension(mm) & Wiring

World Smallest 1/3" SONY 480TVL EX-VIEW CAMERA





MOD	EL(21mm dia.)	ECB-3321WT	ECB-3421WST	
Image Sen (1/3" Color		1/3"SHARP high Sensitive+New6032Chipset NTSC: 270K Pixel, PAL: 320K Pixel	1/3"SHARP highSensitive+New6032Chipset NTSC: 410K Pixel, PAL: 470K Pixel	
Effective Pixels		512(H) x492(V) :NTSC, 500(H) x582(V):PAL	768(H) x 494(V) :NTSC, 752(H) x 582(V):PAL	
H. Resoluti	ion	380 TV Lines	480TV Lines	
Synchroniz	ring system	Inte	Internal	
Scanning s	system	NTSC 525 Lines PAL 625 Lines 2:1 Interlaced (Non- Interaced Avilable)		
Video outp	ut	1.0Vp-p Comp	osite. 75 Ohms	
S/N ratio		More then 50	dB (AGC Off)	
Min. Illumir	nation	0.3Lux at F2.0	0.01Lux at F2.0	
BLC (Back Ligh	t compensation)	Autor	matic	
Shutter Sp	eed	NTSC : 1/60 ~ 1/100,000 sec	PAL : 1/50 ~ 1/100,000 sec	
Gamma correction		r= 0.45 , Automatic		
White Bala	nce	2500°K ~ 9200°K Auto		
Gain contro	ol	4dB ~ 32dB Auto		
Smear Effe	ect	0.005%		
MTTF		80,000hours		
Power sou	rce	DC 12V (Voltage Tole	rance : 8V ~ 20V DC)	
Operating of	current	70mA w / regulated power input	80mA w / regulated power input	
Lens	Standard	STD : f=3.6mm (92°)		
Lens	Option	2.5mm, 2.9mm, 4.3mm, 6.0mm, 8.0mm, 12mm, 16mm		
Output terr	ninal	4 Feet DIY cable with BNC-Female for Video, DC Jack-Male for Power (STD)		
Operating ¹	Temperature	14°F ~ 144°F (-10° C ~ +60° C)		
Humidity		Within 95% RH (IP Rati	ng = 67, Weatherproof)	
Measurement (mm)		68mm)	c 21mm	
Weight (Ap	pprox.g)	88	Bg	
	IR Sensitivity Lens	Yes	Yes	
Optional Features	Audio	Yes	Yes	
realures	Hood (Sunshield)	Yes (Groove Type / Flat Type)	Yes (Groove Type / Flat Type)	



Weatherproof 28mm dia. SHARP Varifocal Bullet CAMERA

KEY FEATURES

- Excellent picture quality at low light sensitivity.
- Supreme True Color reproduction & clearest picture quality
- Professional features & Superior functions (IP=66)
- Crystal clear front cover & perfect moisture-resistant structure
- Easy adjustable 4-9mm Varifocal Lens Built-in
- Beautiful design & compact size for various user's application
- Convenient Celling & robust Installation Bracket Included
- Extremely Low Power Consumption & Wide voltage tolerance
- Accidental Surge and Shock Protection circuits Built-in
- Reverse Polarity protection built in
- *Audio Available (option)
- *IR Sensitivity Lens available (Option)

Inside View

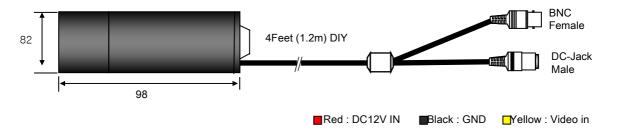


Optional Hood



Dimension(mm) & Wiring

World Smallest Vrifocal Bullet CAMERA(IP=66)





MOE	DEL(21mm dia.)	ECB-3328WV	ECB-3428WV	
Image Sen (1/3" Colo		1/3"SHARP high Sensitive+New6032Chipset NTSC: 270K Pixel, PAL: 320K Pixel	1/3"SHARP highSensitive+New6032Chipset NTSC: 410K Pixel, PAL: 470K Pixel	
Effective P	Pixels	512(H) x492(V) :NTSC, 500(H) x582(V):PAL	768(H) x 494(V) :NTSC, 752(H) x 582(V):PAL	
H. Resolut	ion	380 TV Lines	480TV Lines	
Synchroniz	zing system	Inte	Internal	
Scanning s	system	NTSC 525 Lines PAL 625 Lines 2:	1 Interlaced (Non-Interaced Avilable)	
Video outp	out	1.0Vp-p Comp	osite. 75 Ohms	
S/N ratio		More then 50	dB (AGC Off)	
Min. Illumir	nation	0.1Lux at F1.6	0.3Lux at F1.6	
BLC (Back Ligh	t compensation)	Autor	matic	
Shutter Sp	eed	NTSC : 1/60 ~ 1/100,000 sec	PAL: 1/50 ~ 1/100,000 sec	
Gamma correction		r= 0.45 , Automatic		
White Bala	ance	2500°K ~ 9200°K Auto		
Gain contr	ol	4dB ~ 32dB Auto		
Smear Effe	ect	0.005%		
MTTF		80,000hours		
Power sou	ırce	DC 12V (Tolerance : 8V ~ 20V DC)		
Operating	current	70mA w / regulated power input	80mA w / regulated power input	
Lens	Standard	f=4-9mm Varifocal Lens (STD) -92.6° ~ 39.4° (D)		
Lens	Option	2.6~6.0mm Varifocal Lens / 3.5-8mm Auto DC Iris Varifocal lens		
Output terr	minal	4 Feet DIY cable with BNC-Female for Video, DC Jack-Male for Power (STD)		
Operating Temperature		14°F ~ 142°F (-10° C ~ +60° C)		
Humidity		Within 90% RH (IP Rating = 66, Weatherproof)		
Measurement (mm)		28mm(D) x 98mm(L) – V	28mm(D) x 98mm(L) – World Smallest VF Bullet	
Weight (Approx.g)		10	102g	
Available Color for Housing		Black (STD),	White, Silver	
Optional	Audio	Yes	Yes	
Features	Hood (Sunshield)	Yes (Groove Type / Flat Type)	Yes (Groove Type / Flat Type)	



Weatherproof 28mm dia. SONY Varifocal Bullet CAMERA

KEY FEATURES

- 1/3" SONY SUPER HAD 380TVL/480TVL High Resolution Camera
- Excellent picture quality at low light sensitivity.
- Supreme True Color reproduction & clearest picture quality
- Professional features & Superior functions (IP=66)
- Crystal clear front cover & perfect moisture-resistant structure
- Easy adjustable 4-9mm Varifocal Lens Built-in
- Beautiful design & compact size for various user's application
- Extremely Low Power Consumption & Wide voltage tolerance
- Accidental Surge and Shock Protection circuits Built-in
- Reverse Polarity protection built in
- *Audio Available (option)
 *IR Sensitivity Lens available (Option)



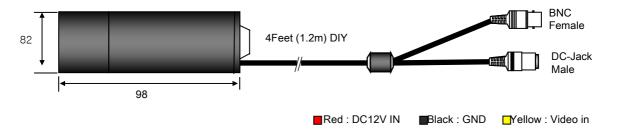


Optional Hood



Dimension(mm) & Wiring

World Smallest Varifocal Bullet Camera (IP=66)





MOE	DEL(21mm dia.)	ECB-2028WV	ECB-5028WV	
Image Sen (1/3" Colo		1/3" Super HAD CCD SONY STD Resolution	1/3" EX-VIEW CCD SONY High Resolution	
Effective P	Pixels	768(H) x 494(V) :NTSC	C, 752(H) x 582(V):PAL	
H. Resolut	ion	480TV	Lines	
Synchroniz	zing system	Inte	rnal	
Scanning s	system	NTSC 525 Lines PAL 625 Lines 2:1	Interlaced (Non- Interlaced Available)	
Video outp	but	1.0Vp-p Compo	osite. 75 Ohms	
S/N ratio		More then 50	dB (AGC Off)	
Min. Illumir	nation	0.1Lux at F1.6	0.01Lux at F1.6	
BLC (Back Light compensation)		Autor	natic	
Shutter Speed		NTSC: 1/60 ~ 1/100,000 sec PAL: 1/50 ~ 1/100,000 sec		
Gamma co	orrection	r= 0.45 , Automatic		
White Bala	ance	2500°K ~ 9200°K Auto		
Gain contro	ol	4dB ~ 32dB Auto		
Smear Effe	ect	0.005%		
MTTF		80,000hours		
Power sou	ırce	DC 12V (Tolerance : 8V ~ 20V DC)		
Operating	current	100mA w / regulated power input	110mA w / regulated power input	
Lens	Standard	f=4-9mm Varifocal Lens (STD) -92.6° ~ 39.4° (AOV)		
Lens	Option	2.6~6.0mm Varifocal Lens		
Output terr	minal	4 Feet DIY cable with BNC-Female for Video, DC Jack-Male for Power (STD)		
Operating	Temperature	14°F ~ 142°F (-10° C ~ +60° C)		
Humidity		Within 90% RH (IP Rating = 66, Weatherproof)		
Measurem	ent (mm)	28mm(D) x 98mm(L) – V	Vorld Smallest VF Bullet	
Weight (Approx.g)		10	2g	
Available (Color for Housing	Black (STD),	White, Silver	
Optional	Audio	Yes	Yes	
Features	Hood (Sunshield)	Yes (Groove Type / Flat Type)	Yes (Groove Type / Flat Type)	

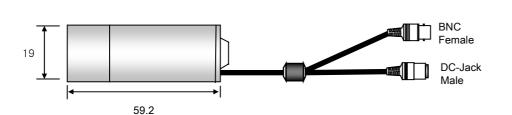


Weatherproof(IP=67) 19mm dia. 1/3" CCD Bullet CAMERA

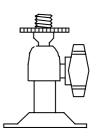
KEY FEATURES

- Excellent picture quality at low light sensitivity.
- Supreme True Color reproduction & clearest picture quality
- Professional features & Superior functions (IP=66)
- Crystal clear front cover & perfect moisture-resistant structure
- Easy various lens changing & mounting as different viewable distance
- Beautiful design & compact hand grip size for various application
- Easy & robust Installation
- Extremely Low Power Consumption & Wide working voltage tolerance
- Reverse Polarity protection circuits built in
- *Audio Available (option)
- *IR Sensitivity Lens available (Option)

Dimension(mm) & Wiring







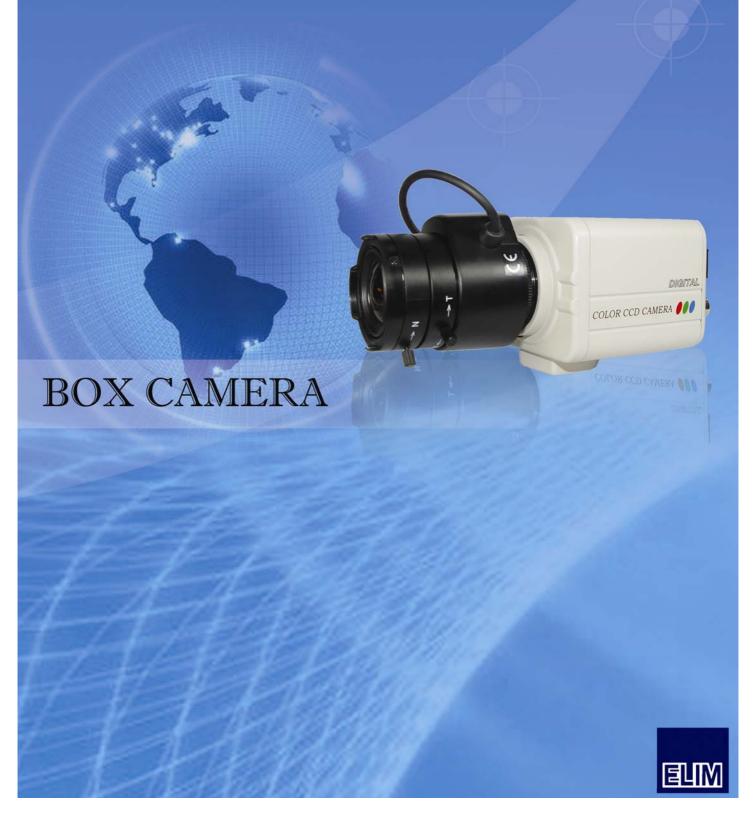


MOE	DEL(21mm dia.)	EBB-1019WST	
Image Sensor (1/3" Color CCD)		1/3" Super Sensitive LG STD Resolution / SHARP	
Effective Pixels		512(H) x 492(V) :NTSC, 500(H) x 582(V):PAL	
H. Resolut	ion	420TV Lines	
Synchroniz	zing system	Internal	
Scanning s	system	NTSC 525 Lines PAL 625 Lines 2:1 Interlaced	
Video outp	out	1.0Vp-p Composite. 75 Ohms	
S/N ratio		More than 50 dB (AGC Off)	
Min. Illumii	nation	0.01Lux at F2.0	
BLC (Back Light compensation)		Automatic	
Shutter Speed		NTSC : 1/60 ~ 1/100,000 sec PAL : 1/50 ~ 1/100,000 sec	
Gain contr	ol	4dB ~ 32dB Auto	
Smear Effe	ect	0.005%	
MTTF		80,000hours	
Power sou	rce	DC 12V (Tolerance : 9V ~ 15V DC)	
Operating	current	70mA, regulated power input	
	Standard	f=3.6mm (AOV: 92°)	
Lens	Option	2.5mm, 2.9mm, 4.3mm, 6.0mm, 8.0mm, 12mm	
Output terr	minal	4Feet DIY cable with BNC-Female for Video, DC for Power	
Operating	Temperature	14°F ~ 124°F (-10° C ~ +50° C)	
Humidity		Within 95% RH	
Measurem	ent (mm)	58.2mm x 19mm	
Weight (Ap	oprox.g)	78g	
Optional	IR Sensitivity	Yes	
Features	Audio	Yes	





ELLIM continues to supply digiralized various surveillance system and high-performance security units which are equipped with the most sophisiticated technologies - most stable surveillance systems for most complicated security circumstances - for security of your life & property



BOX CAMERA

1/3" SONY SUPER HAD COLOR CCD 520TVL High Resolution Module



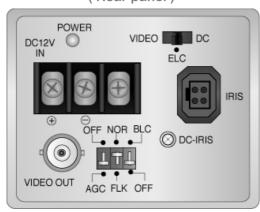
MODEL	ECH - 5060		
Signal System	NTSC	PAL	
Total / Effective Pixcels	410K / 380K	470K / 440K	
Pick-Up Device	1/3 Inch Interline	color CCD (Super)	
Lens Mount	C/C	S mount	
Iris	DC iris / Video	Iris / Shutter Iris	
Signal process	Digital Sig	gnal Process	
Scanning System	2 :1 lı	nterlace	
Sync. system	Int	ernal	
Scanning Frequency	59.94 Hz (VD)	50 Hz (VD)	
Resolution	480 Line (H)	470 Line (H)	
S/N Ratio	More than 48 dB		
Standard Illuminance	2000 Lux	x (3200°K)	
Sensitivity (1/3 Output)	0.5 Lux (F 1.8)		
Video Output Signal	1 Vp-p Comp	posite (75 ohm)	
Gain Control	Auto (AGC max gain ON / OFF)		
Exposure	Automatic control with Dc / Video	Iris meter / Electronic Llight Control	
Flickerless	ON	/ OFF	
White Balance	А	uto	
Back Light	Compensati	ion Auto / OFF	
Power Source	DC 10)V ~ 14V	
Power Consumption	Less that	an 180mA	
Operating Temp	-10°C ~ 50°C (Humi	dity : 0%RH ~ 80%RH)	
Storage Temp	-20°C ~ 60°C (Humidity : 0%RH ~ 85%RH)		
Weight(w/o lens)	220g		
Dimensions (w/o lens)	60(H) x 50	0(V) x 68(D)	



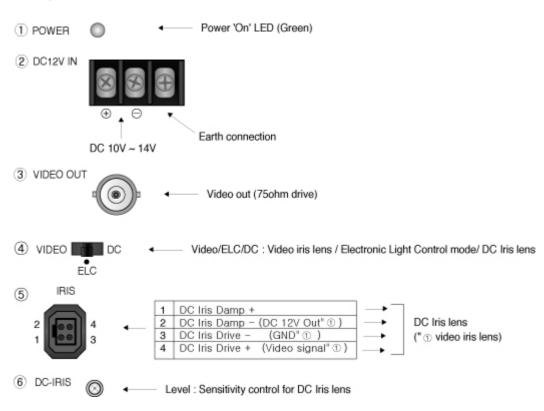
BOX CAMERA

Connection

(Rear panel)



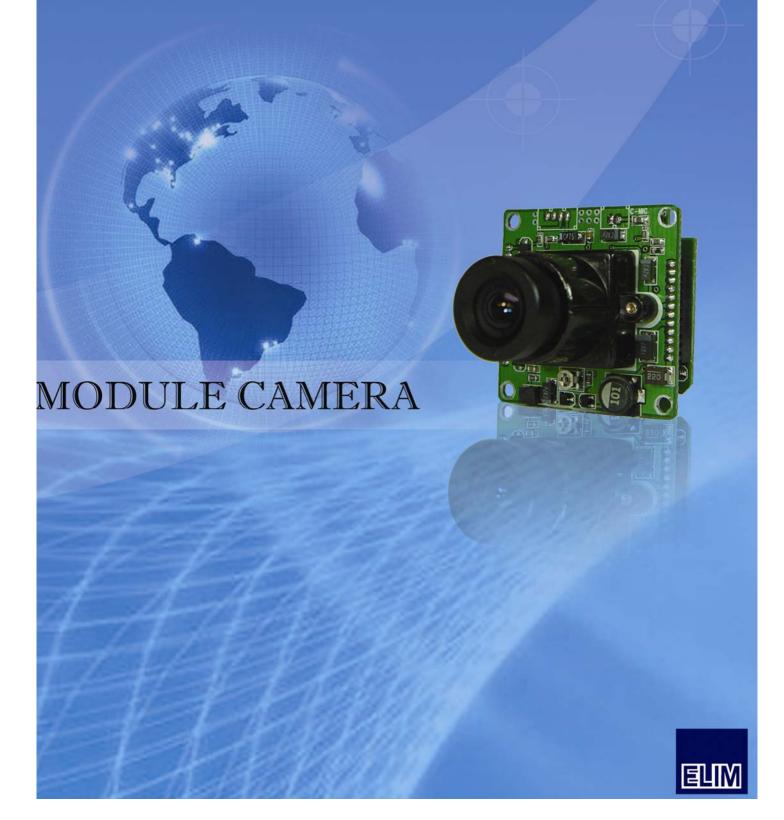
Assignment







ELLIM continues to supply digiralized various surveillance system and high-performance security units which are equipped with the most sophisiticated technologies - most stable surveillance systems for most complicated security circumstances - for security of your life & property

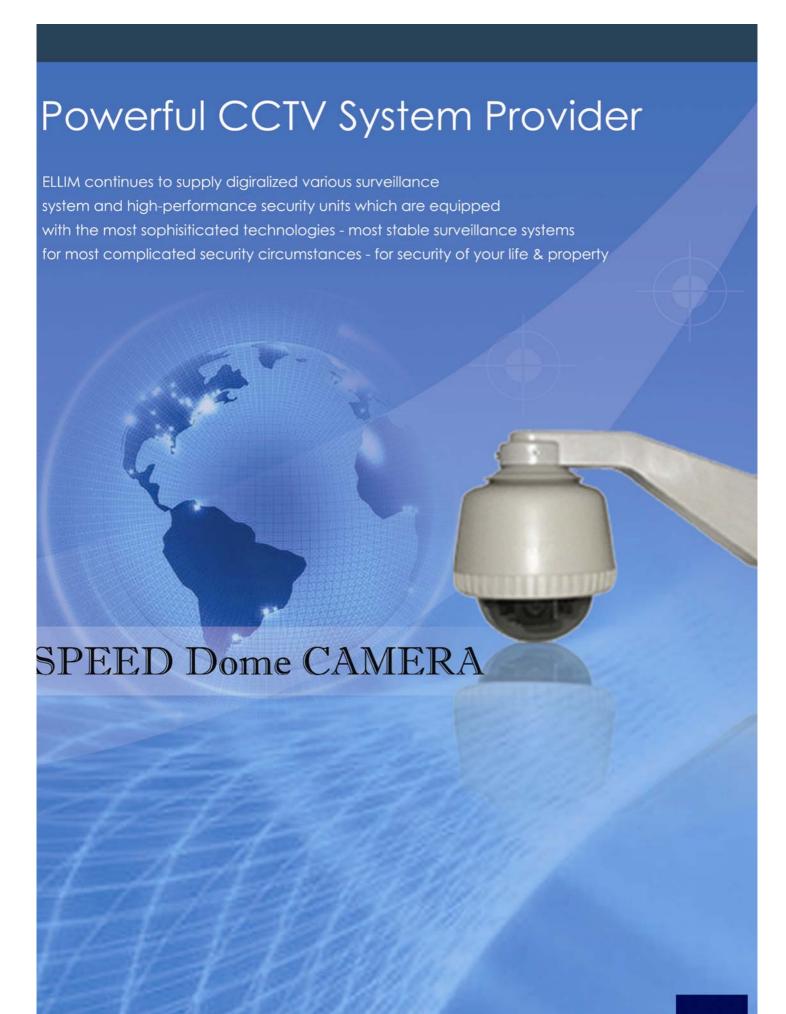


Module CAMERA

1/3" SONY SUPER HAD COLOR CCD 520TVL High Resolution Module



MODEL	E	CM - 2232ST	
Main Chip Set	Sony	DSP (SS - HQ1)	
Image Sensor	Sony – 1/3Inch Super HAD Color CCD	Sony – 1/3Inch Super HAD Color CCD	
Effective pixels	768 (Horizontal) x 494 (Vertical)	752 (Horizontal) x 582 (Vertical)	
Video System	NTSC TV System	PAL TV System	
Scanning system	NTSC : 525 Lines	PAL: 625 Lines, 2:1 Interlaced	
Scanning Frequency	15.734 [KHZ]/H 59.94 [HZ]/V	15.625 [KHZ]/H 50 [HZ]/V	
Shutter speed	1/60 ~ 1/100,000 sec	1/60 ~ 1/100,000 sec	
Sync system	lı	nternal Sync	
H - Resolution		520 TV Lines	
S/N Ratio	48 [dB] / AGC Off		
Minimum Illumination	0.1 Lux (F : 2.0 / 30 IRE)		
Gamma	0.45 Approx		
CCD Level Control	ELC / ALC		
AGC Gain Control	Automatic (0 ~ 18dB)		
White Balance	Automa	atic White Balance	
C. Video Output	VBS 1.0 Vp-p / 75 ohm Vide	eo : 0.7 Vp-p / Sync : 0.3Vp-p / Burst : 0.3Vp-p	
Input Voltage	1	DC 9V ~ 16V	
Current	Max : 180m	A +/- 10mA (at 12VDC)	
Operating Temp	-2	20 ° C ~ +50° C	
Dimentions	32mm x 32mm (Two – Board)		
Ontion	DC Auto Iris Lens		
Option	Audio		
Dip Switch	BLC / Flicker on - off		





Optical 27x Day & Night Aluminum Topped SPEED Dome Camera



ELECTRONIC FEATURES

- 1/4" SONY SUPER HAD 480TVL High Resolution image Sensor Built-in
- World Best Weatherproof, Tamperproof with Speed pan & Tilt Mechanism built-in
 - Maximum rotating Angle of PAN/Speed: 0-360°/ 2 sec Maximum increasing degree of TILT/Speed: 0-90°/ 0.3 sec
- Digitalized Remarkable Color reproduction & Outstanding low Illumination Sensitivity
- Powerful OSD (On Screen Display) S/W Support, Display position Selectable
- Micom (Digital micro Processor) IC Control System Built-in
 - Automatic 28 steps PAN/TILT Speed Control available
 - Accurate 128 point preset function available
 - Stable 8 kinds of tour & 2/4 different pattern function available
 - Maximum 255 ID Camera Connection Available
- Accidental Surge and Shock protector Built-in.
- Reverse Polarity power protection and extremely low Power Consumption
- Extremely Low power Consumption & Wide Working Dual power tolerance.
- Internal / line lock function available

© ELECTRONIC FEATURES

- Robust aluminum Housing & Topped Polycarbonate Clear Cover Built-in
- Weatherproof (IP=66) for installing universal applications at indoor / Outdoor
- Easy install mechanism & Easy exchange various lens mountable
- Circular diffused reflection free mechanism
- *Corner mounting Bracket Available (Option)
- *Ceiling mounting Bracket Available (Option)





	SPECIFICATION
Image Sensor	1/4" SONY SUPER HAD HIGH RESOIUTION CCD
Horizontal TV Lines	NTSC : 480 TVL (Day/Color) / 600TVL (Night /BW)
	PAL: 470 TVL (Day/Color) / 570TVL (Night /BW)
Min. Illumination	0.01 lux (Black and White) or 1 lux(color) – Electronics Sensitive-up Mode : 0.01Lux
Effective Pixels	NTSC : 410,000Pixels, NTSC(525TVL) : 768 x 494
	PAL: 470,000Pixels, PAL(625TVL): 752 x 582
Video output	1.0Vp-p PAL/CCIR 75Ω/BNC
S/N Ratio	More than 50dB
Power Source	DC12V , 3A (±20%) SMPS Prefered (linear power)
Power consumption	Max. 24W
Pan Speed	0.1° ~ 120° / sec
Tilt Speed	0.1° ~ 120° / sec
Scanning System	2 : 1 Interlace
Pan Scan Scope	360° run (Endless Pan)
The frequency of Pan for Scanning	NTSC : 15,734KHz, PAL : 15,625KHz
The frequency of Tilt for Scanning	NTSC : 59,94KHz, PAL : 50KHz
During Time for finding preset	Under 2 seconds
Preset speed	120°/sec
Aperture Compensation mode	Auto (Open/close) / Manual
Relay time for Sticking focus	Max. 1.65 sec
Scan precision	0.225 ± 0.03
Communication	Standard RS-485
Available Baud rate	2400、4800、9600bps available
Operating Temperature	-40°C ~ 60°C (Outdoor) / -20°C ~ 50°C (indoor)
IP Rating	IP66 Authorised





- 1/4" SONY Hi-Resolution EX-VIEW 480TVL
- Built-in 27x Option Zoom Auto Focus Lens
- Min. Illumination : 0.01Lux (Digital slow Shutter)
- Digital IR Zoom Lens with rue Day & night Function
- w/Dual IR CUT filter Automatic change
- Motion Detection, Auto focus, Auto Iris
- Six Alternative white balance control Mode
- cooling Pan & ceramic Heater (Option)
- RS232 / RS485 Multi protocol, 9600bps

	SPECIFICATION
Image Sensor	1/4" SONY High Resolution SUPER HAD (410k Pix.)
H. Resolution / Pixel	NTSC : 480 TVL , PAL : 470 TVL
n. Resolution / Pixel	NTSC(525TVL): 768 x 494, PAL(625TVL): 752 x 582
Min. Illumination	0.1Lux(color), 0.01Lux(B/W)
	Optical Zoom 27X, Digital Zoom 10X927-270X Max.)
Lens	Focal Range : 3.25-88mm AF Zoom (F1.5-3.8)
	AOV (Angle Of View) : 2.38 degree-59.47 Degree
Focus Mode	Auto Focus (Max. 1.65 sec) / Fixed(1/50-1/10,000) 28Steps
Color / BW Control	True Color at Day time & True B/W at Night time
Color / Bvv Control	Digital Micom Controlled Color Signal Changeable
Heater (option)	Ceramic Heater (Operating Temp : 10 °C (Auto Mode))
Cooling Fan (option)	Weatherproof Fan (Operating Temp : 30 °C (Auto Mode))
Operating Temperature (Humidity)	- 40 °C ~ +60 °C (10 ~ 95%)
MTTF	80,000 Hours
Power Source	DC 12V, 3A Regulated (Normal)
Power Source	Max. 5.3W
Remote Control	Rs485 multi-protocol control, 9600bps, Half Duplex
Camera ID Connection	1-255 Lines
Dimensions (W x H x D)	48.9 x 57.6 x 86 mm
Weight	242g



Optical 22x Day & Night Aluminum Topped SPEED Dome Camera



ELECTRONIC FEATURES

- 1/4" SONY SUPER HAD 480TVL High Resolution image Sensor Built-in
- World Best Weatherproof, Tamperproof with Speed pan & Tilt Mechanism built-in
 - Maximum rotating Angle of PAN/Speed: 0-360°/ 2 sec Maximum increasing degree of TILT/Speed: 0-90°/ 0.3 sec
- Digitalized Remarkable Color reproduction & Outstanding low Illumination Sensitivity
- Powerful OSD (On Screen Display) S/W Support, Display position Selectable
- Micom (Digital micro Processor) IC Control System Built-in
 - Automatic 28 steps PAN/TILT Speed Control available
 - Accurate 128 point preset function available
 - Stable 8 kinds of tour & 2/4 different pattern function available
 - Maximum 255 ID Camera Connection Available
- Accidental Surge and Shock protector Built-in.
- Reverse Polarity power protection and extremely low Power Consumption
- Extremely Low power Consumption & Wide Working Dual power tolerance.
- Internal / line lock function available

© ELECTRONIC FEATURES

- Robust aluminum Housing & Topped Polycarbonate Clear Cover Built-in
- Weatherproof (IP=66) for installing universal applications at indoor / Outdoor
- Easy install mechanism & Easy exchange various lens mountable
- Circular diffused reflection free mechanism
- *Corner mounting Bracket Available (Option)
- *Ceiling mounting Bracket Available (Option)







- High Sensitive 1/4 " SONY Super HAD CCD
- Built-in Auto Focus / Auto Iris
- 22x Optical Power Zoom Lens
- 10x Digital Zoom (220x Zoom)
- RS-232C TTL Interface
- 64 Preset Mode
- OSD (On Screen Display)

SPECIFICATION		
Image Sensor	1/4 " Type Solid State image Sensor	
Effective Pixel	NTSC: 768 x 494, PAL: 752 x 582	
Resolution	480 TVL	
Lens	22X Optical Zoom f=3.9mm(wide) 85.8mm(tele) F1.6 to F3.7	
Angle of View	47 $^{\circ}$ (wide end) 3.0 $^{\circ}$ (tele end)	
Min Distance	10mm (wide end) 1000mm(tele end)	
Zoom	22X optical 10X digital	
Sync System	Internal	
White Balance	Auto	
MTTF	80,000 Hours	
Electronic Shutter	NTSC: 1/60 ~ 1/10,000	
	PAL : 1/50 ~ 1/10,000	
Min Illumination	1 Lx Day / Night (0.1Lx)	
Video Output	Composite : 1.0Vp-p Unbalanced	