

P.C.B Module For Video Doorphone

- B/W Camera Module
- Color Camera Module

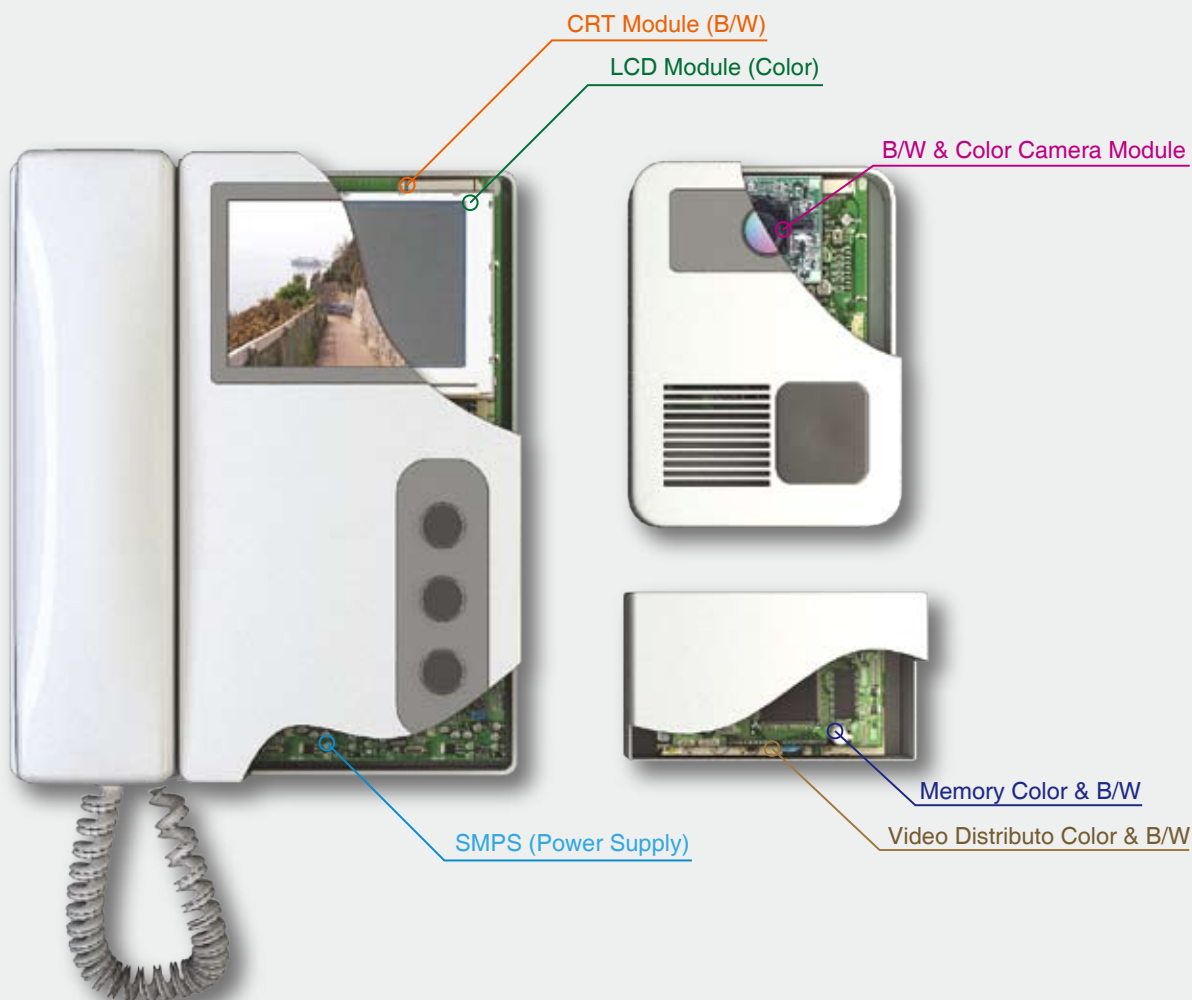
- CRT 20" Module
- CRT 13" Module
- CRT 13" Short Neck

- LCD 2.5" Module
- LCD 3.5" Module
- LCD 4" Module
- LCD 5" Module
- LCD 7" Module

- Video Memory Color Module
- Video Memory B/W Module

- Video Distributor

- Power Supply



Hanse
Hanse Electronics Co., Ltd.

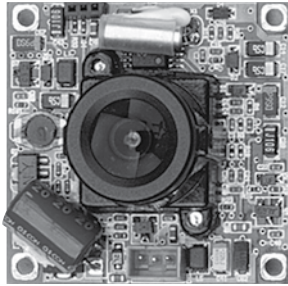
■ Seoul Office

■ Homepage
■ Head Office

■ E-mail
■ ZHUHAI HANSE ELECTRONICS CO., LTD

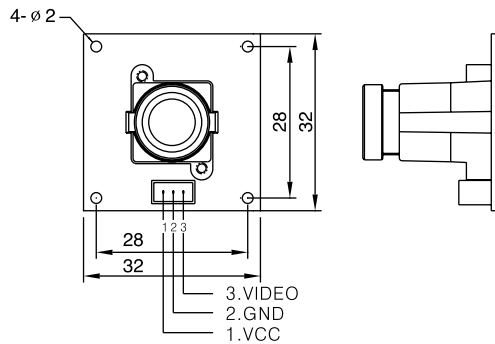
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DSP Color Camera Module CA-072N/P



Dimension

unit: mm

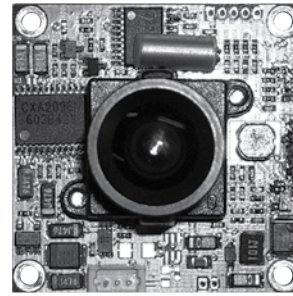


Specifications

	CA-072N	CA-072P
TV System	NTSC	PAL
Image sensor	1/4 inch CCD 270K pixels	1/4 inch CCD 320K pixels
Effective pixels	512(H)x491(V)	512(H)x581(V)
Scanning system	525 Lines 2:1 interlace	625 Lines 2:1 interlace
Scanning frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)
Sync. System	Internal Sync.	
Horizontal resolution	330TV Lines	
Min. Illumination	0.5Lx / F=1.2 (AGC ON)	
S/N ratio	48dB or above (AGC OFF)	
Gamma	$\gamma = 0.45$	
White balance	ATW	
Gain control	Auto	
Electronic Shutter	Auto	
Shutter speed	1/60~1/100,000 sec.	1/50~1/100,000 sec.
Video output	1.0 ± 0.2Vp-p, 75ohm	
Power consumption	DC12V ± 10%, Max. 110mA	
Operating temp.	-10°C~60°C	
Dimension(mm)	32(W)x32(H)	
Lens	3.6mm / F=2.0(Default) or Option	

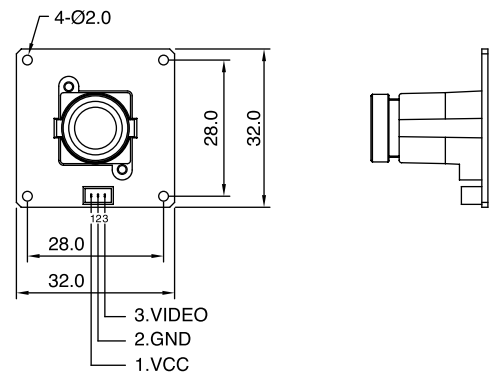
※ Board lens(12mm, 8mm, 6mm, 4.3mm, 2.9mm, 2.2mm), Pin-hole
Lens(Flat lens, Semi cone lens, Super cone lens)

DSP Color Camera Module CA-272N/P



Dimension

unit: mm

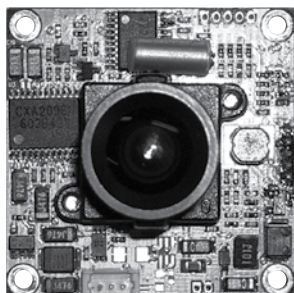


Specifications

	CA-272N	CA-272P
TV System	NTSC	PAL
Image sensor	1/3 inch CCD 270K pixels(SONY)	1/3 inch CCD 320K pixels(SONY)
Effective pixels	510(H)x492(V)	500(H)x582(V)
Scanning system	525 Lines 2:1 interlace	625 Lines 2:1 interlace
Scanning frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)
Sync. System	Internal	
Horizontal resolution	380TV Lines (Center)	
Min. Illumination	0.1Lx / F=1.2(AGC ON)	
S/N ratio	48dB (AGC OFF)	
Gamma	$\gamma = 0.45$	
White balance	ATW	
AGC	ON	
IRIS	Electrical Auto IRIS	
Shutter speed	1/60~1/100,000 sec.	1/50~1/100,000 sec.
Video Output	1.0 ± 0.2Vp-p, 75ohm	
BLC	ON	
Power Consumption	DC12V ± 20%, Max. 120mA	
Operating Temp	-10°C~60°C	
Dimension(mm)	32(W)x32(H)	
Lens	3.6mm / F=2.0(Default) or Option	

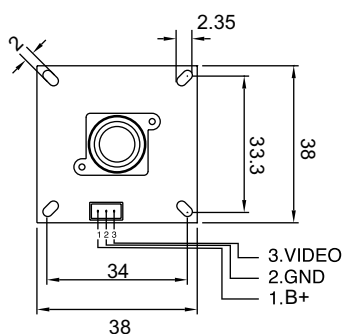
※ Board lens(12mm, 8mm, 6mm, 4.3mm, 2.9mm, 2.2mm), Pin-hole
Lens(Flat lens, Semi cone lens, Super cone lens)

DSP Color Camera Module CA-273N/P



Dimension

unit: mm

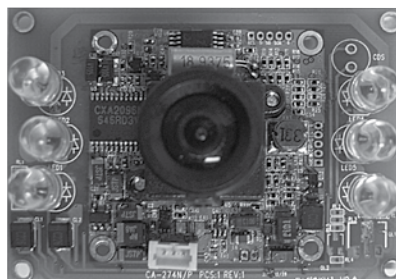


Specifications

	CA-273N	CA-273P
TV System	NTSC	PAL
Image sensor	1/3 inch CCD 270K pixels(SONY)	1/3 inch CCD 320K pixels(SONY)
Effective pixels	510(H)x492(V)	500(H)x582(V)
Scanning system	525 Lines 2:1 interlace	625 Lines 2:1 interlace
Scanning frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)
Sync. System	Internal	
Horizontal resolution	380TV Lines (Center)	
Min. Illumination	0.1Lx / F=1.2(AGC ON)	
S/N ratio	48dB (AGC OFF)	
Gamma	$\gamma=0.45$	
White balance	ATW	
AGC	ON	
IRIS	Electrical Auto IRIS	
Shutter speed	1/60~1/100,000 sec.	1/50~1/100,000 sec.
Video Output	1.0 $\pm$ 0.2Vp-p, 75ohm	
BLC	ON	
Power Consumption	DC12V $\pm$ 20%,Max. 120mA	
Operating Temp	-10 $^{\circ}$ C~60 $^{\circ}$ C	
Dimension(mm)	38(W)x38(H)	
Lens	3.6mm / F=2.0(Default) or Option	

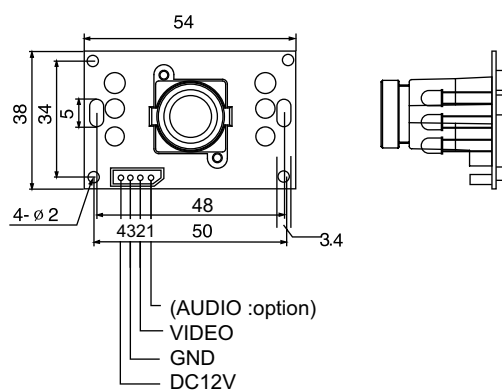
※ Board lens(12mm, 8mm, 6mm, 4.3mm, 2.9mm, 2.2mm), Pin-hole
Lens(Flat lens, Semi cone lens, Super cone lens)

DSP Color Camera Module CA-274N/P



Dimension

unit: mm

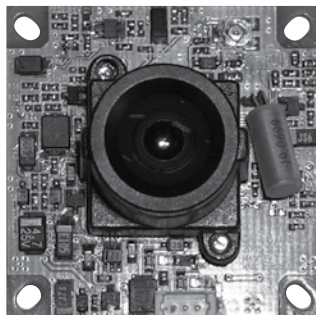


Specifications

	CA-274N	CA-274P
TV System	NTSC	PAL
Image sensor	1/3 inch CCD 270K pixels(SONY)	1/3 inch CCD 320K pixels(SONY)
Effective pixels	510(H)x492(V)	500(H)x582(V)
Scanning system	525 Lines 2:1 interlace	625 Lines 2:1 interlace
Scanning frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)
Sync. System	Internal	
Horizontal resolution	380TV Lines (Center)	
Min. Illumination	0.1Lx / F=1.2, infrared Led (Built-in 6 IR LED) ON : 0Lx	
S/N ratio	48dB (AGC OFF)	
Gamma	$\gamma=0.45$	
White balance	ATW	
AGC	ON	
IRIS	Electrical Auto IRIS	
Shutter speed	1/60~1/100,000 sec.	1/50~1/100,000 sec.
Video Output	1.0 $\pm$ 0.2Vp-p, 75ohm	
BLC	ON	
Power Consumption	DC12V $\pm$ 20%,Max. 160mA	
Operating Temp	-10 $^{\circ}$ C~60 $^{\circ}$ C	
Dimension(mm)	54(W)x38(H)	
Lens	3.6mm / F=2.0(Default) or Option	

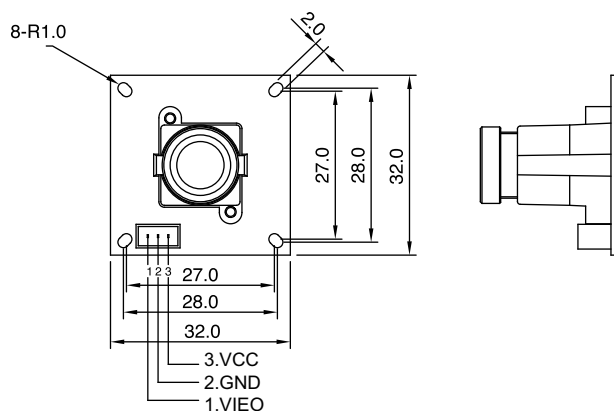
※ Board lens(12mm, 8mm, 6mm, 4.3mm, 2.9mm, 2.2mm), Pin-hole
Lens(Flat lens, Semi cone lens, Super cone lens)

B/W Camera Module CA-81A/C



Dimension

unit: mm

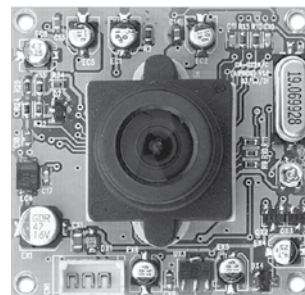


Specifications

	CA-81A	CA-81C
TV System	EIA	CCIR
Image sensor	1/3 inch CCD 270K pixels	1/3 inch CCD 320K pixels
Effective pixels	510(H)x492(V)	500(H)x582(V)
Scanning system	525 Lines 2:1 interlace	625 Lines 2:1 interlace
Scanning frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)
Sync. System	Internal Sync.	
Horizontal resolution	420TV Lines (Center)	
Min. Illumination	0.1Lx / F=1.2, (AGC ON)	
S/N ratio	50dB (AGC OFF)	
Gamma	$\gamma = 0.45$	
AGC	ON	
IRIS	Electrical Auto IRIS	
Shutter speed	1/60~1/100,000 sec.	1/50~1/100,000 sec.
Video output	1.0 $\pm$ 0.2Vp-p, 75ohm	
Power consumption	DC12V $\pm$ 20%, Max. 100mA	
Operating temp.	-10℃~60℃	
Dimension(mm)	32(W)x32(H)	

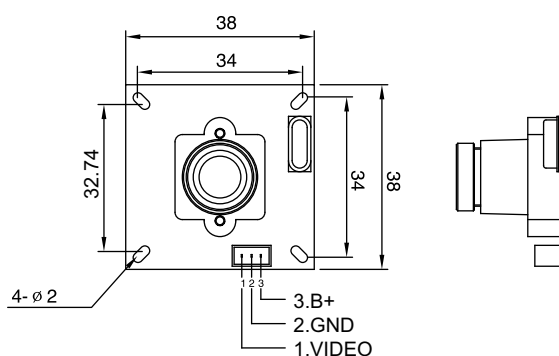
※ Board lens(12mm, 8mm, 6mm, 4.3mm, 2.9mm, 2.2mm), Pin-hole
Lens(Flat lens, Semi cone lens, Super cone lens) Varifocal lens

B/W Camera Module CA-82A/C



Dimension

unit: mm

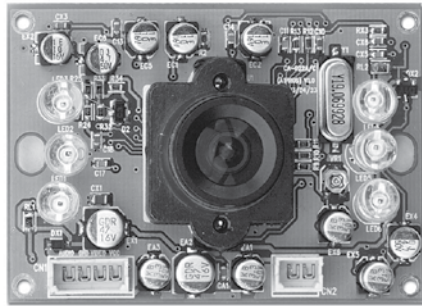


Specifications

	CA-82A	CA-82C
TV System	EIA	CCIR
Image sensor	1/3 inch CCD 270K pixels	1/3 inch CCD 320K pixels
Effective pixels	510(H)x492(V)	500(H)x582(V)
Scanning system	525 Lines 2:1 interlace	625 Lines 2:1 interlace
Scanning frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)
Sync. System	Internal Sync.	
Horizontal resolution	420TV Lines (Center)	
Min. Illumination	0.1Lx / F=1.2	
S/N ratio	50dB (AGC OFF)	
Gamma	$\gamma = 0.45$	
AGC	ON	
IRIS	Electrical Auto IRIS	
Shutter speed	1/60~1/100,000 sec.	1/50~1/100,000 sec.
Video output	1.0 $\pm$ 0.2Vp-p, 75ohm	
Power consumption	DC12V $\pm$ 20%, Max. 100mA	
Operating temp.	-10℃~60℃	
Dimension(mm)	38(W)x38(H)	

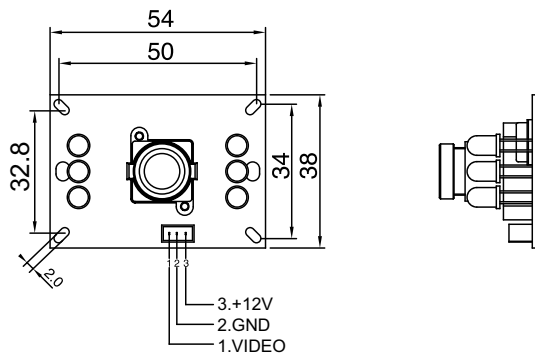
※ Board lens(12mm, 8mm, 6mm, 4.3mm, 2.9mm, 2.2mm), Pin-hole
Lens(Flat lens, Semi cone lens, Super cone lens) Varifocal lens

B/W Camera Module CA-84A/C



Dimension

unit: mm

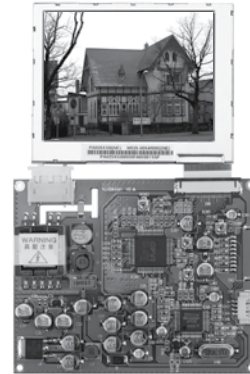


Specifications

	CA-84A	CA-84C
TV System	EIA	CCIR
Image sensor	1/3 inch CCD 270K pixels	1/3 inch CCD 320K pixels
Effective pixels	510(H)x492(V)	500(H)x582(V)
Scanning system	525 Lines 2:1 interlace	625 Lines 2:1 interlace
Scanning frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)
Sync. System	Internal Sync.	
Horizontal resolution	420TV Lines (Center)	
Min. Illumination	0.1Lx / F=1.2, (AGC ON), IR LED NO : 0Lx	
S/N ratio	50dB (AGC OFF)	
Gamma	$\gamma = 0.45$	
AGC	ON	
IRIS	Electrical Auto IRIS	
Shutter speed	1/60~1/100,000 sec.	1/50~1/100,000 sec.
Video output	1.0±0.2Vp-p, 75ohm	
Power consumption	DC12V ± 10%, Max. 130mA	
Operating temp..	-10℃~60℃	
Dimension(mm)	54(W)x38(H)	

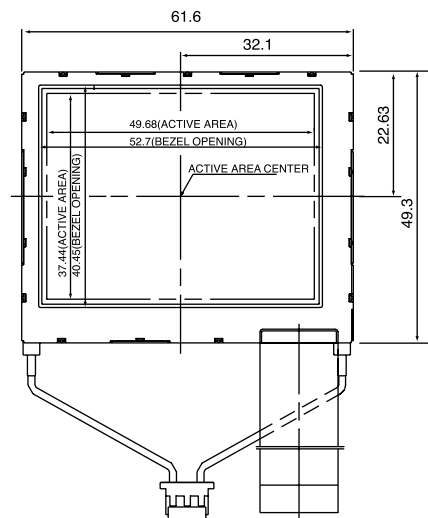
※ Board lens(12mm, 8mm, 6mm, 4.3mm, 2.9mm, 2.2mm), Pin-hole
Lens(Flat lens, Semi cone lens, Super cone lens) Varifocal lens

Color TFT L.C.D Module LCD-2500F



Dimension

unit: mm



Features

- Color Video Doorphone
- Low power consumption
- Best quality image
- CCTV Monitor

Specifications

Optical Characteristics

Screen size	2.45" Diagonal
Color configuration	RGB Delta Configuration
Dot pitch	0.1035(W) x 0.160(H)mm
Resolution	480 x 234(dot)
Active Area	49.68(W) x 37.44(H)mm
View angle	(CR.≥10) Horizontal ±45° Vertical 30°, 10°
Contrast Ratio	350
Brightness	250cd/m ²

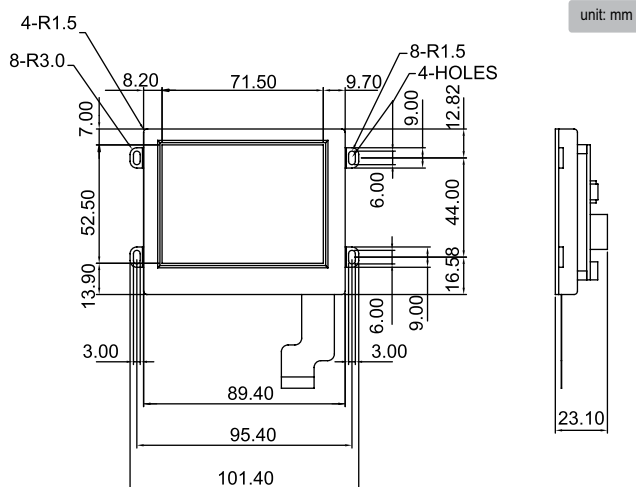
Electrical Characteristics

TV system	NTSC/PAL available
Input signal	Composite video signal 1Vp-p, 75ohm
Operating Voltage	11V~13V
Power consumption	DC 12V 200mA, 2.7W

Color TFT L.C.D Module LCD-3501L



Dimension



Features

- Color Video Doorphone
- Low power consumption
- Best quality image
- CCTV Monitor

Specifications

Optical Characteristics

Screen size	3.5" Diagonal
Color configuration	RGB Delta Configuration
Dot pitch	0.0745(W) x 0.225(H)mm
Resolution	960 x 234(dot)
Active Area	71.60(W) x 52.65(H)mm
View angle	(CR.≥10) Horizontal ±45° Vertical 30°, 10°
Contrast Ratio	350
Brightness	250cd/m ²

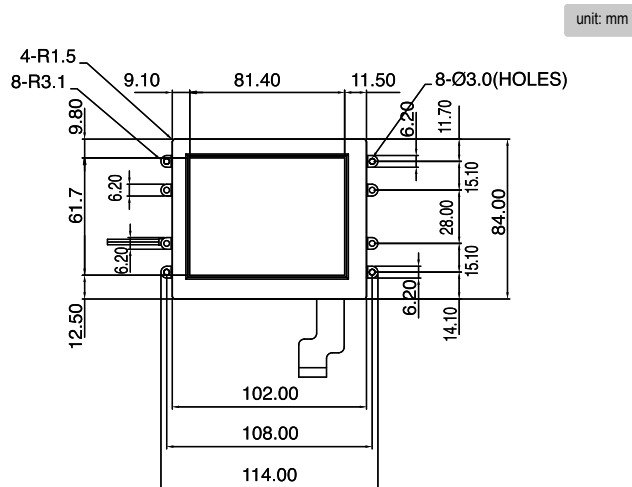
Electrical Characteristics

TV system	NTSC/PAL available
Input signal	Composite video signal 1Vp-p, 75ohm
Operating Voltage	11V~13V
Power consumption	DC 12V 120mA, 1.5W

Color TFT L.C.D Module LCD-4010F



Dimension



Features

- Color Video Doorphone
- Low power consumption
- Best quality image
- CCTV Monitor

Specifications

Optical Characteristics

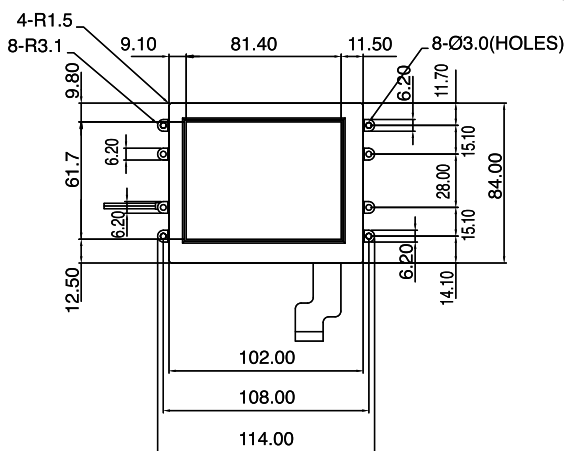
Screen size	4" Diagonal
Outline Dimension	96(H) x 75.6(V) x 3.65(D) (mm)
Active Area	81(H) x 61.2(V) (mm)
Number of dots	320(H) x RGB x 240(V)
Dot Pitch	0.255 x 0.233 (mm)
Display Mode	TN/Transmissive / Normally White
Viewing Direction	6 o'clock / 12 o'clock(good viewing)
Color Filter Array	RGB Vertical Stripe
Signal Interface	Digital RGB + SPI Interface
Weight	50g(Typ.)
Backlight	8 LEDs (Serial Type)

Color TFT L.C.D Module LCD-4002L



Dimension

unit: mm



Features

- Color Video Doorphone
- Low power consumption
- Best quality image
- CCTV Monitor

Specifications

Optical Characteristics

Screen size	4" Diagonal
Color configuration	RGB Delta Configuration
Dot pitch	0.171(W) x 0.264(H)mm
Resolution	480 x 234(dot)
Active Area	82.12(W) x 52.65(H)mm
View angle	(CR.≥10) Horizontal ±45° Vertical 30°, 10°
Contrast Ratio	150
Brightness	250cd/m ²

Electrical Characteristics

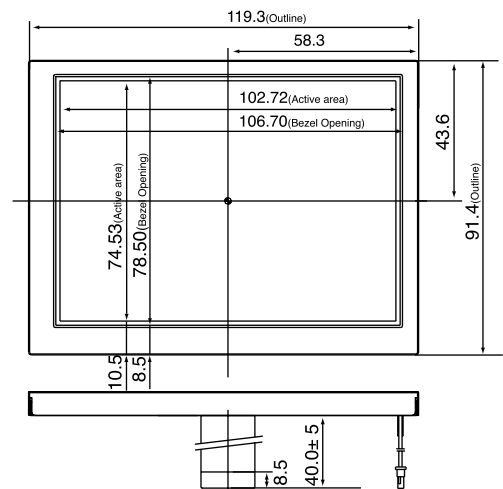
TV system	NTSC/PAL available
Input signal	Composite video signal 1Vp-p, 75ohm
Operating Voltage	11V~13V
Power consumption	DC 12V 150mA, 1.8W

Color TFT L.C.D Module LCD-5000F



Dimension

unit: mm



Features

- Color Video Doorphone
- Low power consumption
- Best quality image
- CCTV Monitor

Specifications

Optical Characteristics

Screen size	5" Diagonal
Color configuration	RGB Stripe Configuration
Dot pitch	0.107(W) x 0.319(H)mm
Resolution	960 x 234(dot)
Active Area	102.72(M) x 74.53(V)mm
View angle	(CR.≥10) Horizontal ±45° Vertical 30°, 10°
Contrast Ratio	150
Brightness	400cd/m ²

Electrical Characteristics

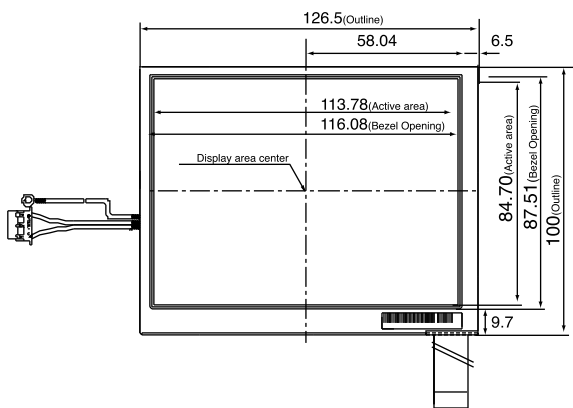
TV system	NTSC/PAL available
Input signal	Composite video signal 1Vp-p, 75ohm
Operating Voltage	11V~13V
Power consumption	DC 12V 390mA, 4.7W

Color TFT L.C.D Module LCD-5600F



Dimension

unit: mm



Features

- Color Video Doorphone
- Low power consumption
- Best quality image
- CCTV Monitor

Specifications

Optical Characteristics

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	300cd/m ²

Electrical Characteristics

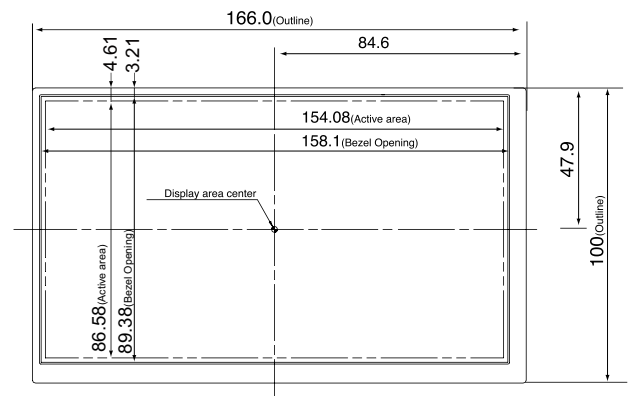
TV system	NTSC/PAL available
Input signal	Composite video signal 1Vp-p, 75ohm
Operating Voltage	11V~13V
Power consumption	DC 12V 480mA, 5.8W

Color TFT L.C.D Module LCD-7001F



Dimension

unit: mm



Features

- Color Video Doorphone
- Low power consumption
- Best quality image
- CCTV Monitor

Specifications

Optical Characteristics

Screen size	7" Diagonal
Color configuration	RGB Stripe Configuration
Dot pitch	0.107(W) x 0.370(H)mm
Resolution	1440 x 234(dot)
Active Area	154.08(H) x 86.58(v)mm
View angle	(CR.≥10) Horizontal ±55° Vertical 35°, 15°
Contrast Ratio	150
Brightness	350cd/m ²

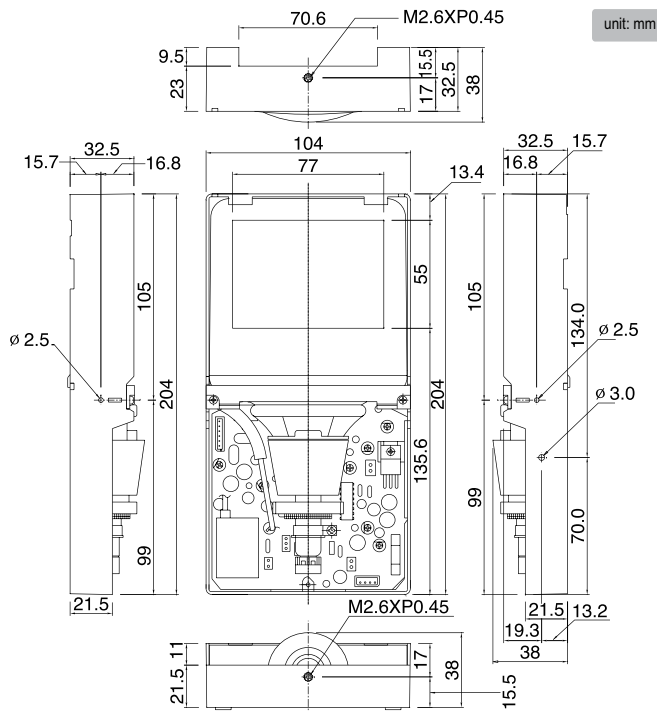
Electrical Characteristics

TV system	NTSC/PAL available
Input signal	Composite video signal 1Vp-p, 75ohm
Operating Voltage	11V~13V
Power consumption	DC 12V 540mA, 6.5W

4" B/W Flat Monitor 510F CRT



Dimension



Specifications

PRINCIPAL SPECIFICATIONS OF THE 4-INCH FLAT CRT DISPLAY UNIT

CRT	4-inch flat CRT
Screen size	81(W) x 59(H), Diagonal 101mm
Horizontal resolution	450TV Lines
Frequency	CCIR 15.625Khz(H), 50Hz(V) EIA 15.735Khz(H), 60Hz(V)
Input Signal	Composite video signal 1Vp-p, 75ohm
Input Terminal	Signal/Power consumption: 4Pin Connector
Operating Voltage	DC 11V~13V
Power Consumption	DC 12V, 370± 10mA, 4.5W
External Control	Contrast and brightness
Weight / Dimension	650g/ 104(W)x204(H)x38(D)

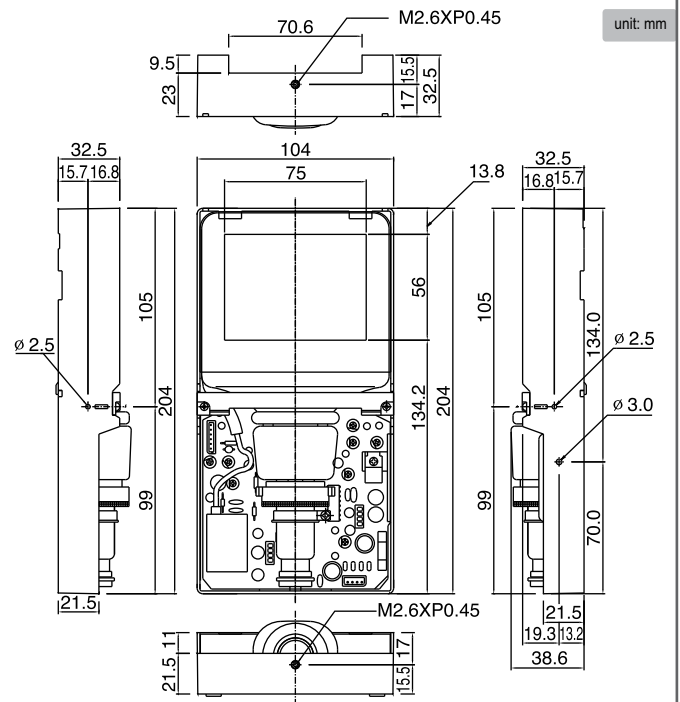
PRINCIPAL SPECIFICATIONS OF THE 4-INCH FLAT CRT

Neck Diameter	13mm
Effective Screen Area	81(W) x 59(H), Diagonal 101mm
Brightness	Over 100nits
Resolution	450TV Lines
Deflection System	Electromagnetic
Fluorescent Material	P45 white
Use	Portable TV, TV door phon, etc.
Features	Thin, low power consumption and high resolution

4" B/W Flat Monitor 520F CRT



Dimension



Specifications

PRINCIPAL SPECIFICATIONS OF THE 4-INCH FLAT CRT DISPLAY UNIT

CRT	4-inch flat CRT
Screen size	81(W) x 59(H), Diagonal 101mm
Horizontal resolution	450TV Lines
Frequency	CCIR 15.625Khz(H), 50Hz(V) EIA 15.735Khz(H), 60Hz(V)
Input Signal	Composite video signal 1Vp-p, 75ohm
Input Terminal	Signal/Power consumption: 4Pin Connector
Operating Voltage	DC 11V~13V
Power Consumption	DC 12V, 320± 10mA, 4W
External Control	Contrast and brightness
Weight / Dimension	650g/ 104(W)x204(H)x38.6(D)

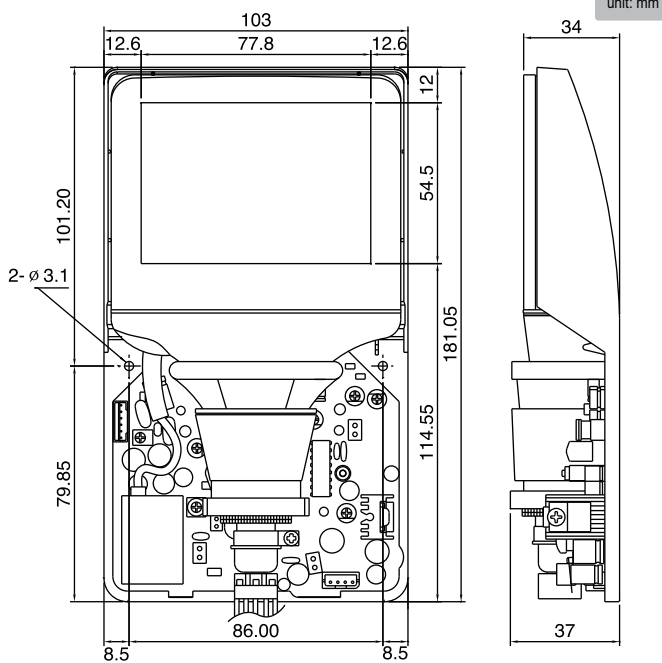
PRINCIPAL SPECIFICATIONS OF THE 4-INCH FLAT CRT

Neck Diameter	20mm
Effective Screen Area	81(W) x 59(H), Diagonal 101mm
Brightness	600cd/m²
Resolution	450TV Lines
Deflection System	Electromagnetic
Fluorescent Material	P45 white
Use	Portable TV, TV door phon, etc.
Features	Thin, low power consumption and high resolution

4" B/W Flat Monitor
530F CRT



Dimension



Specifications

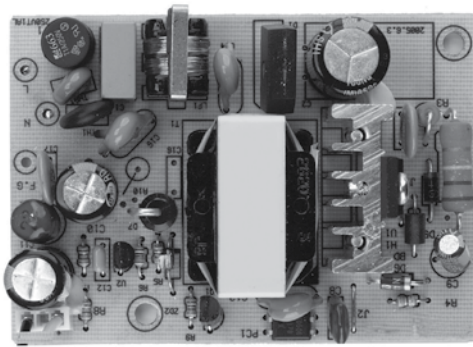
PRINCIPAL SPECIFICATIONS OF THE 4-INCH FLAT CRT DISPLAY UNIT

CRT	4-inch flat CRT
Screen size	76(W) x 68(H), Diagonal 101mm
Horizontal	resolution 450TV Lines
Frequency	CCIR 15.625KHz(H), 50Hz(V) EIA 15.735KHz(H), 60Hz(V)
Input Signal	Composite video signal 1Vp-p, 75ohm
Input Terminal	Signal/Power consumption:4Pin Connector
Operating Voltage	DC 11V~13V
Power Consumption	DC 12V, 370± 10mA, 4W
External Control	Contrast and brightness
Weight / Dimension	480g/ 103(W)x181.05(H)x37(D)

PRINCIPAL SPECIFICATIONS OF THE 4-INCH FLAT CRT

Neck Diameter	13Ø
Effective Screen Area	76(W) x 58(H), Diagonal 101mm
Brightness	Over 100nits
Resolution	450TV Lines
Deflection System	Electromagnetic
Fluorescent Material	P45 white
Use	Portable TV, TV door phon, etc.
Features	Thin, low power consumption and high resolution

SMPS (Switching mode power supply)
HSP-16V1A, HSP-12V1A



Specifications

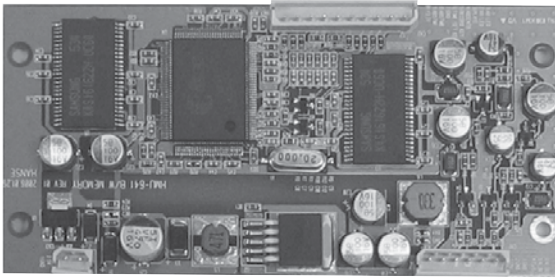
HSP-16V1A

Input	85~264Vac	
Operating Voltage	85~264Vac	
Power Consumption	100V/0.4rms, 220v/0.2Ams	
External Control	Contrast and brightness	
input pin hole	OK	
Output		
Output condition	Wire color	Wire gauge
DC 16V/1a	Yellow	UL AWM 1007#20 150mm
GND	Black	UL AWM 1007#20 150mm
Dimension(mm)	80(W) x 56.3(H) x 24(D)	

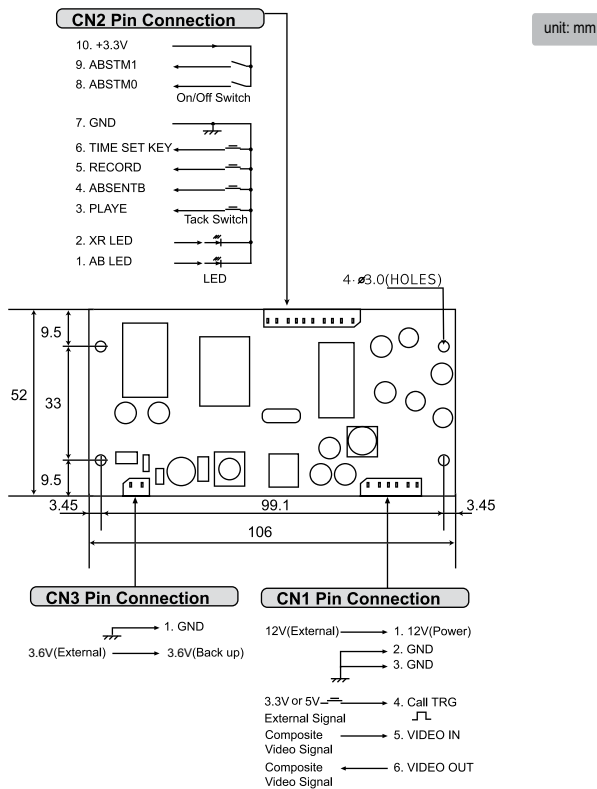
HSP-12V1A

Input		
Operating Voltage	85~264Vac	
Power Consumption	100V/0.4rms, 220v/0.2Ams	
External Control	Contrast and brightness	
input pin hole	1.8(Ø)x3	
Output		
Output condition	Wire color	Wire gauge
DC 12V/1a	Yellow	UL AWM 1007#20 150mm
GND	Black	UL AWM 1007#20 150mm
Dimension(mm)	80(W) x 56.3(H) x 24(D)	

B/W Video Memory Module HMU-641



Dimension



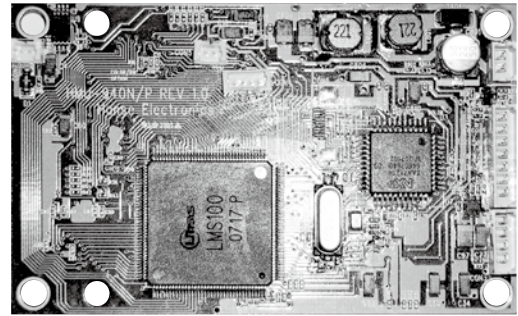
Features

- This video memory unit can be easily connected to any CCTV system.
- Stores 32 images in its memory bank.
- OSD function for Y/M/D/T memory image
- Memory backup battery tmpt
- Can be adjusted Memory interval time

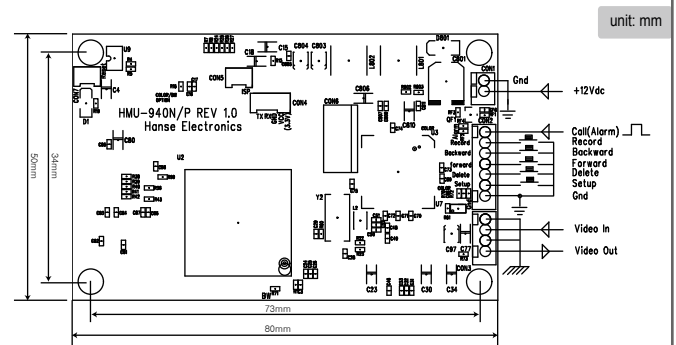
Specifications

	HMU-641A	HMU-641C
Video system	EIA	CCIR
Power supply	DC+12V ± 1V (Constant Voltage Adqptor)	
Power consumption	0.7 Watt (at + 12V)	
Number of memories	EIA : 64 CUT image	CCIR : 64 CUT image
Effective pixels	256(H)x240(H)8bit-EIA	256(H)x256(H)8bit-CCIR
Image Output	Composite Video 1Vpp/75ohm input, 1Vpp ± 100mV Ourput	
Operating temp.	0℃~50℃	
Storage temp.	-10℃~70℃	
Dimension(mm)	106(W) x 52(H) x 11.8(D)mm	

Color Video Memory Module HMU-940



Dimension



Features

- It can record up to 250 cut images.(256MB)
- Full real time display on live image.
- It can select the recording/playback ways between user manual and call(away) key
- Simple menu and easy operation.
- This product is implemented ASIC technology

Specifications

Video System	HMU-940N/P
Power Supply	NTSC / PAL
Power Consumption	+11Vdc ~ +13Vdc
Number of Memories	+12Vdc(120mA)
Effective Pixel	NTSC Over 250CUT / PAL Over 250CUT
Image Input/Output	720 X 480 / 720 X 576
Operating Temp	Composite Video 1Vp-p/75ΩInput, 1Vp-p Output
Storage Temp	0℃ ~ 50℃
Dimension	-10℃ ~ 70℃
	80(W) X 50(H) mm