KT&C INNOVATIVE HIGH DEFINITION SURVEILLANCE

Global Camera

ATC *2MP High Resolution 30x Global Shutter Zoom Camera*

HZ8930M-LP

LVDS / Parallel / CVBS

1/3.1" CMOS | 60/50fps FHD 1080p | 30x AF ZOOM | DNR | MOTION | Trigger In / Strobe Out | Global Shutter

Features

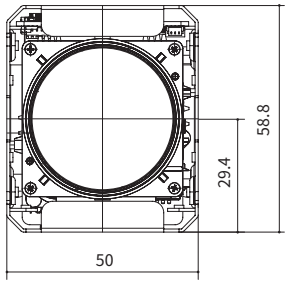
- 1/3.1" Progressive Scan Global Shutter CMOS
- 360x AF Zoom (Optical 30x, Digital 12x)
- 1080p 60/50/30/25fps,
  720p 60/50/30/25fps, 1080i 60/50fps
- Mechanical Day&Night
- True WDR
- 2D/3D DNR, Defog, DIS
- UART (VISCA, PELCO-D/P)

Specifications

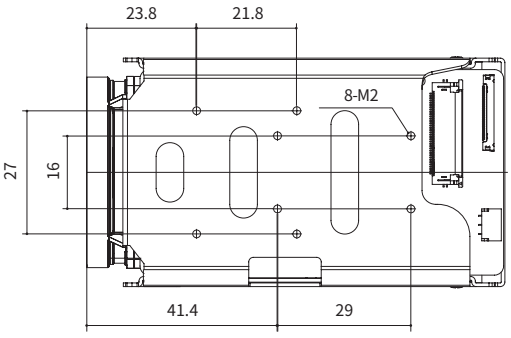
Image Sensor		1/3.1" Progressive Scan Global Shutter CMOS
Effective Pixels		3.2MP 2064(H) x 1552(V)
Video Output Mode		LVDS / Parallel / CVBS
Max. Video Resolution		LVDS/Parallel : 1080p@60(50fps)
Synchronization system		Internal
Min.Illumination		Day : 0.03Lux(F1.6), Night : 0.01Lux(F16/ ICR on) Sens-Up off, AGC48dB
S/N Rate		More than 52dB(AGC off, Sens-Up off)
Lens	Type	AF Optical zoom lens(DC Iris), IR Corrective
	Focal Length	f=4.6mm~136mm
	F-value	F1.63(W)~F4.85(T)
	Angle of View	H 52°(W)~1.8°(T), V 29.9°(W)~1.0°(T)
Zoom ratio		Optical 30x / Digital 12x
Focus Min.Working Distance		0.01m(Wide)/3.0m(Tele)~∞
Focus Control		Auto/Interval/One Shot/Manual/Preset
AE Mode		Auto/Iris Priority/Shutter Priority/Manual
Brightness		1~20
Manual Shutter		1/1, 1/2, 1/4(3), 1/8(6), 1/15(12), 1/30(25), 1/60(50)~1/30000
Manual Iris		F1.6~F19, Close
Sense-up		Off~32fields
ETC		Slow AE
D&N Mode		Auto/Color(Day)/B&W(Night)/EXT-H/EXT-L
White Balance		Auto/Indoor/Outdoor/One push/ATW/Manual
Image Freeze		Off/On
Image Flip		Off/Horizontal/Vertical/H+V(180° Flip)

Privacy Mask Zone		8 Zones/14 mask color selectable
Digital Image Stabilization		Off/On
Motion Detection		4 Zones
D-WDR		Off/Low/Middle/High
WDR		Low/Middle/High
BLC		Off/0~10, Area selectable
HLC		Off/0~20, Color selectable
AGC		Max.48dB
Sharpness		Adjustable(0~15)
3D-DNR		Off/Auto(Level:0~2)/ Manual(Gain:0~255/THLD:0~255/FK:0~255)
2D-DNR		Off/Auto(Level:0~2)/ Manual(Gain:0~255/THLD:0~255)
Defog		Off/On(Low/Middle/High)
Position Preset		Non-volatile 192 position(zoom/focus) presets. 16-presets & custom preset
Language		English, Russian, Spanish, German, French, Portuguese, Chinese, Japanese
UART	Remote	+5.0V / +3.3V
	Protocol	VISCA, PELCO-D/P: Auto Detection
	Baud rate	2400/4800/9600/19200/38400/57600/115200bps
Supply Voltage		12VDC(9V to 15VDC)
Power Consumption		Max.8.4W / Non-working zoom&focus 3.3W
Dimension(mm)		50x58.8x90.8mm
Weight		Approx.261g
Operating Temperature		-10°C~+50°C, Humidity(Less than 90%)
Storage Temperature		-20°C~+60°C, Humidity(Less than 90%)
Remark		

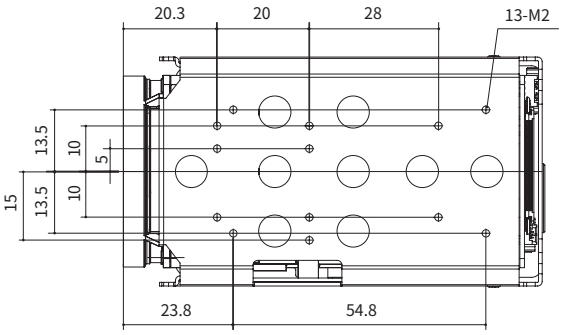
Dimension



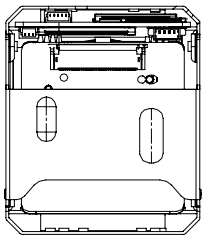
Front



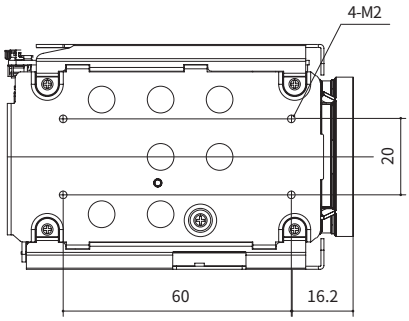
Top



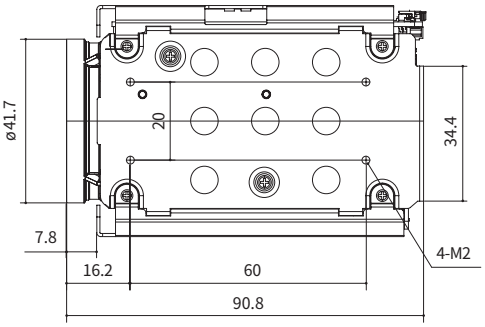
Bottom



Rear

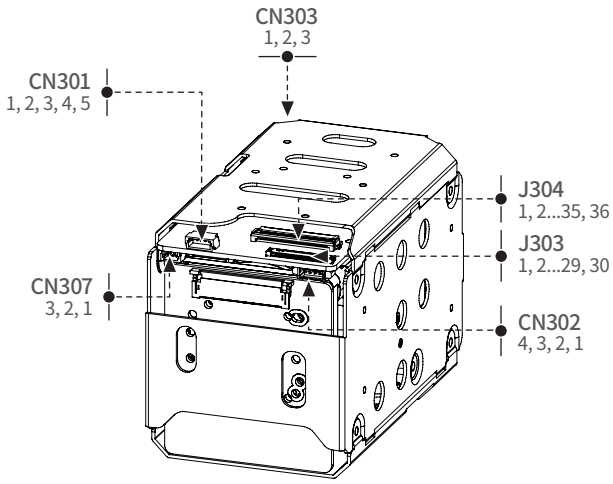


Left



Right

Pin Assignment



Pin no.	CN301(Trigger & Strobe) / JST: SM05B-SRSS-TB
1	Trigger_COM
2	Trigger_IN
3	Strobe_COM
4	Strobe_OUT
5	GND

Pin no.	CN302(CVBS) / Molex: 53261-0471
1	POWER IN: +12VDC
2	GND
3	VIDEO: CVBS Output
4	AD_KEY

Pin no.	CN303(External D&N) / JST: SM03B-SRSS-TB
1	Ext_D&N:External D&N Input
2	GND
3	+3.3V Out(For sensor)

Pin no.	CN307(UART) / JST: SM03B-SRSS-TB
1	GND
2	RXD: CMOS 3.3V Read Data
3	TXD: CMOS 3.3V Send Data

(*1) TXD/RXD

- 5 V : Default level
- 3.3 V : Available on request (factory option)
- RXD input : Accepts both 5 V and 3.3 V signals (tolerant)

Pin no.	J303(Micro Co-Axial) / KEL Co.USL00-30L-A
1	TX_OUT3+
2	TX_OUT3-
3	TX_CLKOUT+
4	TX_CLKOUT-
5	TX_OUT2+
6	TX_OUT2-
7	TX_OUT1+
8	TX_OUT1-
9	TX_OUT0+
10	TX_OUT0-
11	GND
12	TXD(*1) : 5.0V(option 3.3V)
13	RXD(*1) : 5.0V(option 3.3V)
14	+12VDC
15	+12VDC
16	+12VDC
17	+12VDC
18	+12VDC
19	GND
20	GND
21	TX_OUT7+ : Single out mode (open)
22	TX_OUT7- : Single out mode(open)
23	TX_OUT6+ : Single out mode(open)
24	TX_OUT6- :Single out mode(open)
25	CVBS Output
26	RESET_IN: Reset - Low(GND), Nomal(1.8V)
27	TX_OUT5+ : Single out mode (open)
28	TX_OUT5- : Single out mode (open)
29	TX_OUT4+ : Single out mode (open)
30	TX_OUT4- : Single out mode (open)

Pin no.	J304(FFC Connector) / Hirose : FH12-36S-0.5SH(55)
1	GND
2	Y_OUT[0]
3	Y_OUT[1]
4	Y_OUT[2]
5	Y_OUT[3]
6	GND
7	Y_OUT[4]
8	Y_OUT[5]
9	Y_OUT[6]
10	Y_OUT[7]
11	GND
12	C_OUT[0]
13	C_OUT[1]
14	C_OUT[2]
15	C_OUT[3]
16	GND
17	C_OUT[4]
18	C_OUT[5]
19	C_OUT[6]
20	C_OUT[7]
21	GND
22	VSYNC
23	HSYNC
24	GND
25	VCLK_OUT
26	GND
27	GND
28	GND
29	GND
30	GND
31	POWER IN: +12VDC
32	POWER IN: +12VDC
33	POWER IN: +12VDC
34	GND
35	TXD(*1) : 5.0V(option 3.3V)
36	RXD(*1) : 5.0V(option 3.3V)

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