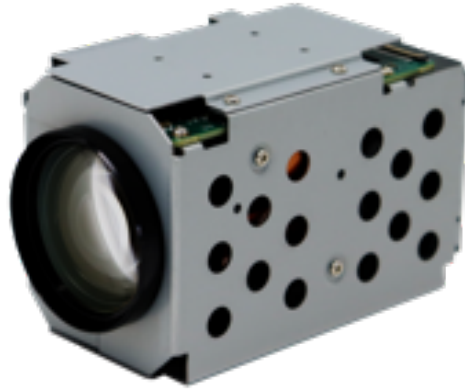


ZCM2133D

2 Megapixels 33x Optical Zoom Network LVDS Starlight Camera Module



Network LVDS zoom camera module is a fully integrated Network LVDS block camera including Image sensor, long range zoom lens, video encoding, video analysis and network transmission functions. It is designed to be flexible embedded into PTZ cameras, bullet cameras, Pan/Tilt positioning cameras, AGV robot systems, UAV drones, etc. Linovision network zoom camera modules provide standard 36-pin cable and complete SDK/ISAPI protocols. It comes with intuitive WEB GUI and CMS software, and OEM is welcomed.

Outstanding Features

- Support digital signal LVDS and network signal dual video output mode
- 1/2.8" Sony 327 progressive scan CMOS sensor
- Up to 2 Megapixels (1920x1080) resolution @ 30fps
- 33x optical zoom (5.5-180mm), 16x digital zoom
- Starlight low light performance, 0.001Lux/F1.5(color), 0.0005Lux/F1.5(black/white), 0 Lux with IR
- Support Electronic Defog
- Provide audio I/O and alarm I/O
- 3D DNR, BLC, HLC, EIS, 120dB WDR
- Support local SD card storage, up to 256GB
- Optional Bluetooth, Wi-Fi, 4G LTE extension modules
- Compact dimension, fits into most of regular PTZs / explosion proof PTZs / bullet enclosures
- Intuitive WEB GUI and free CMS software, flexible OEM service

Possible Enclosures

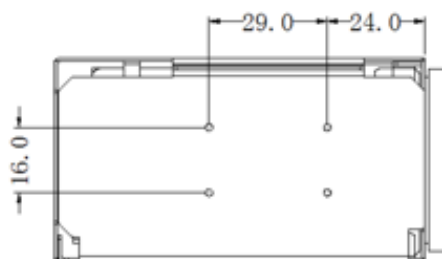
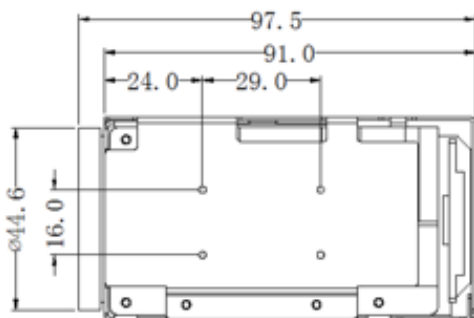
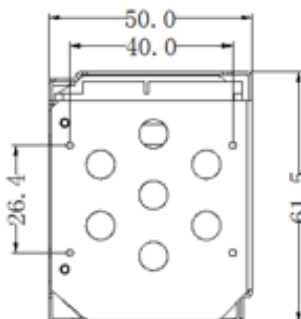
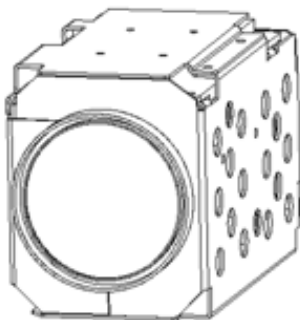


Specification

Camera	
Image Sensor	1/2.8" progressive scan CMOS (Sony 327)
Minimum Illumination	Color: 0.001 Lux @(F1.5,AGC ON) B/W:0.0005Lux @(F1.5,AGC ON)
Shutter	1/25s to 1/100,000s: support slow shutter
Auto Iris	DC
Day/Night Switch	IR cut filter
Digital Zoom	16X
Video Output	Digital signal (LVDS)
Lens	
Focal Length	5.5-180mm, 33X optical zoom
Aperture Range	F1.5-F4.0
Horizontal Field of View	60.5-2.3° (wide-tele)
Minimum Working Distance	100mm-1500mm (wide-tele)
Zoom Speed	Approximately 3.5s (optical, wide-tele)
Image (Maximum Resolution: 1920x1080)	
Main Stream	50Hz: 25fps (1920 x 1080, 1280 x 960, 1280 x 720); 60Hz: 30fps (1920 x 1080, 1280 x 960, 1280 x 720)
Third Stream	50Hz: 25fps (1920 x 1080); 60Hz: 30fps (1920 x 1080)
Image Settings	Saturation, brightness, contrast, sharpness adjusted by IE/ Client
BLC	Support
Exposure Mode	AE / Aperture Priority / Shutter Priority / Manual Exposure
Focus Mode	Auto Focus / One Focus / Manual Focus / Semi-Auto Focus
Area Exposure / Focus	Support
Electronic Defog	Support
Image Stabilization	Support
Day/Night Switch	Automatic, manual, timing, alarm trigger
3D DNR	Support
Network	
Storage	Support Micro SD / SDHC / SDXC card (256G) disconnected local storage, NAS (NFS, SMB / CIFS support)
Protocols	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,RTP,RTSP,RTCP,NTP,SMTP,SNMP,IPv6
Integration Protocol	ONVIF(PROFILE S, PROFILE G)
Interface	
External Interface	36-pin FPC (Network port, RS485, RS232, CVBS, SDHC, Alarm In/Out, Line In/Out, power) LVDS
General	
Working Temperature	-30°C~70°C (-22 °F~ 158 °F) , humidity ≤ 95%(non-condensing)
Power Supply	DC12V±25%
Power Consumption	2.5W MAX (4.5W MAX when ICR switch)
Dimensions	97.5mm x 61.5mm x 50mm or 3.84" x 2.42" x 1.97"
Weight	272g (0.6lbs)

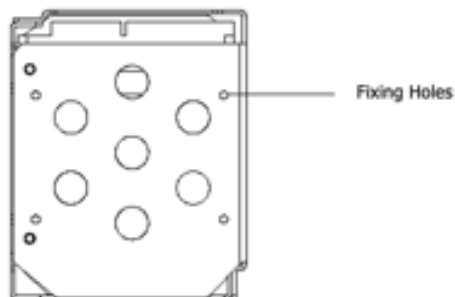
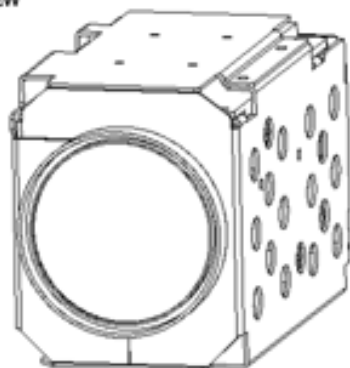
Note: Design and specifications are subject to changes without prior notice.

Dimension (Unit: mm)



Front View

Back View

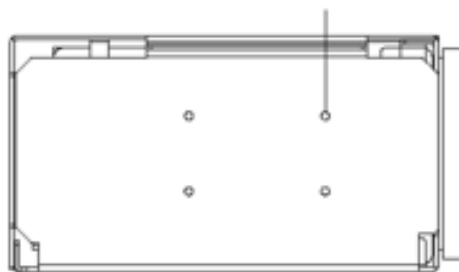
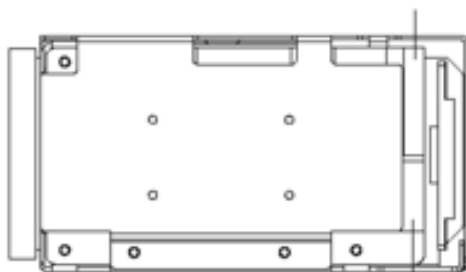


Top View

Bottom View

36-pin FPC Socket

Fixing Holes



LVDS Socket

PIN Definitions

PIN Type	Number	Name	Description	PIN Type	Number	Name	Description
36-pin FPC Socket	1	DC_12V	DC12V input	30-pin FPC LVDS Socket	1	UART1_RXD	UART, RX (3.3V), reserve
	2	DC_12V	DC12V input		2	UART1_TXD	UART, TX (3.3V), reserve
	3	DC_12V	DC12V input		3	GND	GND
	4	GND	GND		4	CVBS_OUT	CVBS Video signal output
	5	GND	GND		5	SYS_RST_N	System Reset signal
	6	CVBS_OUT	CVBS video signal output		6	Not Used	None
	7	GND	GND		7	GND	GND
	8	LINEOUT	Audio signal output		8	GND	GND
	9	GND	GND		9	GND	GND
	10	LINEIN	Audio signal input		10	GND	GND
	11	Not Used	None		11	GND	GND
	12	TX+	Self adaptive network port, TX+		12	GND	GND
	13	TX-	Self adaptive network port, TX-		13	DC_12V	DC12V input
	14	RX+	Self adaptive network port, RX+		14	DC_12V	DC12V input
	15	RX-	Self adaptive network port, RX-		15	DC_12V	DC12V input
	16	GND	GND		16	DC_12V	DC12V input
	17	LINK#	LINK# indicator signal		17	DC_12V	DC12V input
	18	ACT#	ACT# indicator signal		18	UART2_RXD	UART, RX (3.3V), Visca protocol
	19	ALM_OUT	Alarm output		19	UART2_TXD	UART, TX(3.3V), Visca protocol
	20	ALM_IN	Alarm input		20	GND	GND
	21	GND	GND		21	LVDS_TA-	LVDS1 Data N
	22	SD_EN	SDIO SD card power enable		22	LVDS_TA+	LVDS1 Data P
	23	Not used	None		23	LVDS_TB-	LVDS2 Data N
	24	SD_CD	SDIO SD card detection foot		24	LVDS_TB+	LVDS2 Data P
	25	SD_CLK	SDIO clock signal		25	LVDS_TC-	LVDS3 Data N
	26	SD_CMD	SDIO_CMD		26	LVDS_TC+	LVDS3 Data P
	27	SD_DATA3	SDIO data bit3		27	LVDS_TCLK-	LVDS Clock Data N
	28	SD_DATA2	SDIO data bit2		28	LVDS_TCLK+	LVDS Clock Data P
	29	SD_DATA1	SDIO data bit1		29	LVDS_TD-	LVDS4 Data N
	30	SD_DATA0	SDIO data bit0		30	LVDS_TD+	LVDS4 Data P
	31	GND	GND	4-pin USB	1	DC_5V	DC5V output
	32	RS-485-	RS-485 B cable, Pelco protocol		2	USB_DP	USB DP
	33	RS-485+	RS-485 A cable, Pelco protocol		3	USB_DM	USB DM
	34	UART2_TXD	UART port, TX signal (3.3V), Visca protocol		4	GND	GND
	35	UART2_RXD	UART port, RX signal (3.3V), Visca protocol				
	36	SYS_RST_N	System reset signal				

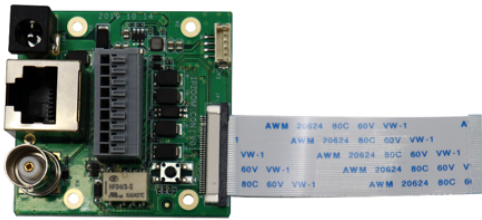
Communication and Configuration

Communication between Zoom Camera Module and PTZ System: RS232/RS485, with PELCO or VISCA protocol.

Configuration:

- WEB GUI
- CMS Software (Windows OS based and MAC OS based)
- SDK/ISAPI

Optional Accessories



Interface Board
(36-pin interface board with RJ45, BNC, Power interfaces)



Drone Gimbal



Pan/Tilt Camera Part
(360-degree Pan/Tilt movement, interface board)



Explosion-proof Enclosure
(Bullet, Dome, customizable)

Applications



Surveillance Security



Border Defense



Robot



Drone



Medical Equipment



Safe City