Pangolin2 Series Railway Smart Camera Brief

Features

1. Embedded x86 industrial PC
   Intel® ATOM™ E3950, 2.0GHz, quad cores
   4GB LPDDR4-2400, 64GB eMMC for OS, soldered onboard
   64-bit OS: Windows 10 IoT Enterprise
   Support gigabit Ethernet, support isolated RS485, isolated digital IOs
2. Embedded global shutter CMOS image sensor
   31MP@20fps or 51MP@10fps
3. Embedded high-resolution lens with optional focal lengths (28/35/55/65/80mm)
4. Embedded motorized focusing mechanism
5. Embedded one M.2 slot for SSD
6. Embedded Wi-Fi with waterproof antenna
7. Embedded electronic dehumidifying for anti-fog on the glass
8. Embedded heater for defogging and deicing of the outer surface of the glass
9. Embedded lightning protection circuit
10. Embedded isolated power module with EN50155 authentication
11. Support 9-36VDC wide voltage range power supply
12. IP67 rating
13. Rugged full metal casing, fanless
14. Ready cables with aviation connectors (optional)
15. Wide operation temperature -40°C to +85°C
16. 2-year warranty for vehicle application

Applications

High-speed rail monitoring

High-speed rail power line suspension inspection

High-end outdoor monitoring

Pictures



Figure 1-1 Product Pictures

Available P/N

Table 1-1 Available P/N

P/N	Type	Pixel	Max fps	Resolution	Description
RSPG2T0ME-xyy-zN	Mono	31MP	20	6464×4852	APS-C global shutter CMOS
RSPG2W0ME-xyy-zN	Mono	51MP	10	8424x6032	35mm full frame global shutter CMOS

Notes：

[1] “x” is the lens manufacturer code. “yy” is the lens focal length.

[2] “z” is the pre-installed M.2 SSD. “N” means no SSD, and “1” means 1TB SSD.

Power Input Port

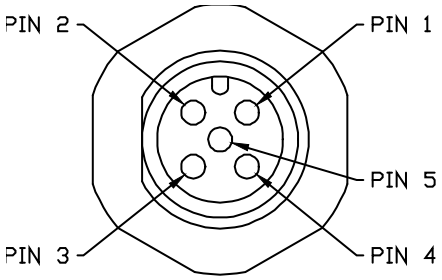


Figure 1-2 Power Input port (M12 5-Pin Male)

Table 1-2 Power Input Port

Pin No.	Function	Direction	Wire Color
			Cable P/N: LZ1-M05A-F05A-08P26N-xxx
1	PWRIN+	IN	White/Orange and Orange
2	PWRIN-	IN	White/Green and Green
3	ISO_IN1	IN	White/Brown
4	ISO_OUT1	OUT	Brown
5	ISO_GND	NA	White/Blue

Control Port

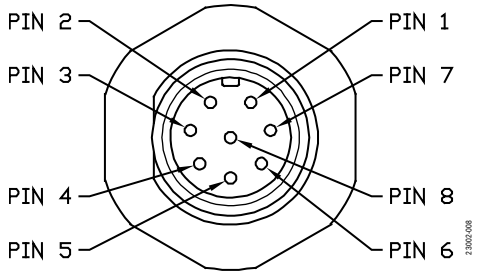


Figure 1-3 Control Port (M12 8-Pin Male)

Table 1-3 Control Port

Pin No.	Function	Direction	Description
1	PWR24V	OUT	Power output for pan-tilt, 24V/25W (max)
2	GND	NA	Power output for pan-tilt, 0V
3	RS485-A	IN/OUT	Isolated RS485 to control pan-tilt
4	RS485-B	IN/OUT	
5	OPT_IN1+	IN	Photocoupler input +
6	OPT_IN1-	IN	Photocoupler input -
7	OPT_OUT1+	OUT	Photocoupler output +
8	OPT_OUT1-	OUT	Photocoupler output -

Ethernet Port

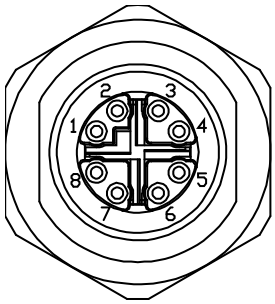


Figure 1-4 Ethernet port (M12 8-Pin Female)

Table 1-4 Ethernet port

Pin No.	Function	Direction	Wire Color
			Cable P/N: RW1-M08X-M08X-08P26N-xxx
1	DATA-P0	IN/OUT	White/Orange
2	DATA-N0	IN/OUT	Orange
3	DATA-P1	IN/OUT	White/Green
4	DATA-N1	IN/OUT	Green

5	DATA-P2	IN/OUT	White/Broun
6	DATA-N2	IN/OUT	Broun
7	DATA-P3	IN/OUT	White/Blue
8	DATA-N3	IN/OUT	Blue

Dimensions

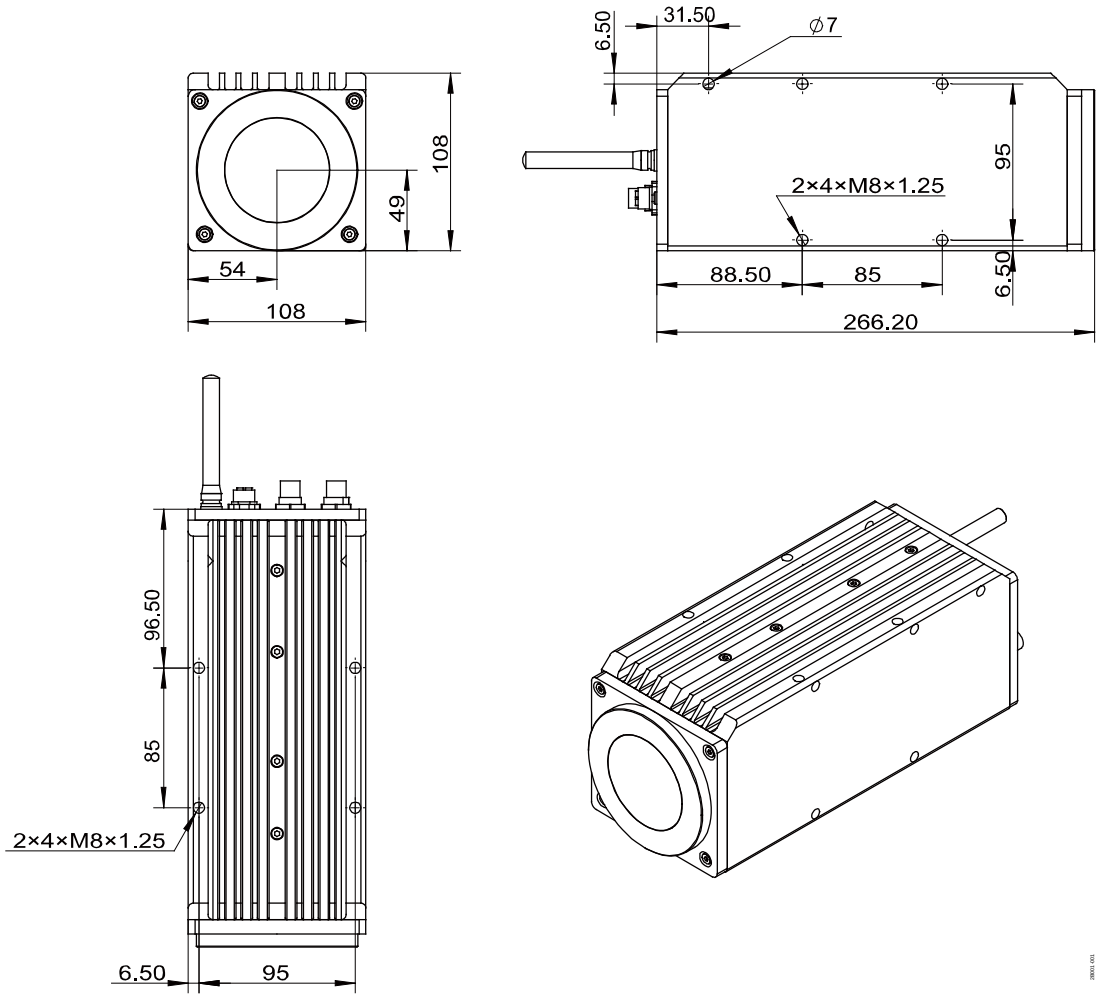


Figure 1-5 Dimensions

Note:

[1] Unit: mm

[2] Materials: aluminum alloy with anodizing process

[3] Color: silver