

Micro Working Distance Camera

Model Name: INS-LXM-228-10GM Series

Change History			
Rev.	Date	Author	Specification
V1.0	Jun. 2024	INSNEX	Original

Contact Us
If you have any doubts or suggestions during the use of the software, please contact us promptly: Insnex Technologies Co.,Ltd Address: Building R, No. 218 Xingming Street, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone Postal Code: 215000 Website: http://www.insnex.com/ Telephone: (86) 0512-67159489 E-mail: Services@Insnex.com

1. Product Outline

Item	INS-LXM-228-10GM-18M	INS-LXM-228-10GM-9M	Note
Control Board	CIS-MAIN*2	CIS-MAIN*2	
Digital Data Output Interface	10GigE*2	10GigE*2	
Command transmission interface	Serial interface	Serial interface	
Scanning width	228	228	mm
Resolution	1800	900	DPI
Effective pixel point	16286	8143	Pixels
Line frequency	80	80	kHz
Scanning speed	1.1	2.2	m/s
Data transfer rate	20	20	Gbps
Power supply	+24V×3A	+24V×3A	To control boards
	+24V×3A	+24V×3A	To LED boards
External Dimension	Figure 1	Figure 1	
Focus position(from glass surface)	15	15	mm
Image format	Mono8	Mono8	
Appearance Colour	Black	Black	

2. Description of Interface

2.1 Trigger in

Pin	Name	I/O	Color	
1	A+	Brown	Shaft encoder phase A+	
2	A-	Blue	Shaft encoder phase A-	
3	B+	White	Shaft encoder phase B+	
4	B-	Green	Shaft encoder phase B-	
5	-	Pink	-	
6	-	Yellow	-	
7	Input1	Black	External trigger input 1 +	
8	Input2	Grey	External trigger input 2 +	
9	GND	Red	GND	
10	Output1	Purple	External trigger output 1 +	
11	Output2	Orange	External trigger output 2 +	
12	GND	Light green	GND	

2.2 Power Input

Pin	Signal	I/O	Color	Description	
1	DC 24V	I	Brown	DC 24V	
2		I	White		
3	GND	I	Blue	GND	
4		I	Black		

2.3 10GigE

Use 10GigE network to transmit commands and data. Please use Category 7 network cable.

3. Serial Interface

This serial interface uses hex code.

Item	Value
Baud rate	115200
Start bit	1
Data bit	8
Parity bit	None
Stop bit	1
Flow control	None

4. Maximum Rating

Item	Symbol	Specification	Note
DC supply voltage	Control boards	+24V±1V	
	LED boards	+24V±1V	
Ambient temperature	Ta	0~+40°C	Operating
		-20~60°C	Storage
Ambient humidity		10%~90%RH	

5. Connector Plug/Unplug

Unplug & plug the cable number should be less than 50. The connector will be ineffective if it is extracted and inserted over that number.

6. Stable Operation

(1) The connector pins should not be touched by bare hands or electrostatic charge materials.

(2) Latch-up

When the supply voltage exceeds the absolute maximum, Latch-up will occur. Latch-up will cause the sensor to be broken, even if the voltage is caused by a surge. If the current varies rapidly in the external circuit, or when the power is switched on and off very frequently, ensure that the voltage of each terminal does not exceed the values indicated in below.

(3) Absolute maximum rating

Item	Specification		Unit
	Min.	Max.	
Control boards supply voltage	-0.3	+25.0	V
LED boards supply voltage	-0.3	+25.0	
Shaft encoder input voltage	-0.3	5.5	
External trigger input voltage	-0.3	25	
External trigger output voltage	-0.3	25	

7. Reliability

Please operate Micro Working Distance Camera under INS operating conditions, which is specified in section 6.

Figure 1. Dimensions

