

Specifications

Model No.	UXM-30LN-P
Power source	10 to 30VDC
Current consumption	During operating: 500mA or less when 10/12VDC, 250mA when 24VDC When starting up: 2A or less when 10VDC, 1.5A or less when 12VDC
Light source	Semiconductor laser diode, $\lambda=905\text{nm}$ (Laser safety class 1)
Principle	Time of flight(pulse system)
Detectable object	6m: $\Phi 10\text{mm}$, 10m: $\Phi 20\text{mm}$, 30m: $\Phi 130\text{mm}$ (Min. object against the distance)
Scanning range	0.1 to 30m ^{*1} (Black diffuse reflection 10%, 500mm \times 500mm)
Scanning accuracy	3,000lux or less -> 0.1 to 10m: $\pm 50\text{mm}$ (500 \times 500mm or more, white paper) ^{*2} 100,000lux or less -> 0.1 to 10m: $\pm 100\text{mm}$ (500 \times 500mm or more, white paper) ^{*2}
Angular resolution	Step angle: 0.25 $^\circ$ (360 $^\circ$ /1,440 steps)
Scanning angle	190 $^\circ$
Scanning time	50msec/scan(Motor speed: 1,200rpm)
Interface	USB2.0(Full speed, 12Mbps for area setting)
Input	Area input 1,2,3,4(total 16 patterns)
Indication lamps	Power lamp(green), Operation lamp(orange): Lights up when detecting, blinks when troubled
Connection	Cable 2m, USB: connector(Binder 09-0431-81-04) ^{*3}
Ambient temperature/humidity	-10 to +50 degrees C(-25 to +75 degrees C when stored), 85%RH or less, not icing, not condensing
Insulation resistance	10M Ω 500VDC megger

Vibration resistance	Double amplitude 1.5mm, 10 to 55Hz, each 2 hour in X, Y and Z directions
Impact resistance	196m/s ² , each 10 time in X, Y and Z directions
Protective structure	IP64(IEC standard)
Life	5 years(motor life, vary depending on use conditions)
Noise	25dB or less
Case materials	Front case: Polycarbonate, back of case: aluminum
Weight	Approx.800g(excluding cable)

*1 Verify the actual performance of the sensor under the intended working environment.

*2 Measurement under direct interference light is not assured.(sunlight etc.) Measuring accuracy may change depending on the conditions in the outside light or reflection of object.

*3 The other side:Binder 99-0430-10-04.(option) USB cable for UXM series.(as an option)

Note1) When operating trouble output, output 1, 2 & 3 show "existing detecting object" state.

Note) This model is not a safety rated product.

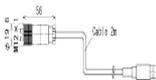
Note) Hokuyo products are not developed and manufactured for use in weapons, equipment, or related technologies intended for destroying human lives or creating mass destruction. If such possibilities or usages are revealed, the sales of Hokuyo products to those customers might be halted by the laws of Japan such as Foreign Exchange Law, Foreign Trade Law or Export Trade Control Order.In addition, we will export Hokuyo products for the purpose of maintaining the global peace and security in accordance with the above laws of Japan .

External dimension

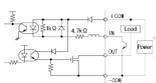
- sensor



- USB cable for UXM series(option:UZ00023)



Input/output circuit



* Shield cable FG(Frame Ground). Make it to the stable chassis.

Rated 30VDC, 100mA or less.

Caution) Limiting resistor is required for OUTPUT.

Connection

- Cable(power)

Colors	Signals
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Brown	10 to 30VDC
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Blue	0V
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Green	Area input 1
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Yellow	Area input 2
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Purple	Area input 3
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White/yellow	Area input 4
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Orange	Trouble output
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Black	Detection output 1
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White	Detection output 2
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White/blue	Detection output 3
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Red	COM for I/O(+COM)
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Gray	COM for output(-COM)
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Yellow/red	NC
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Yellow/green	NC
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Yellow/black	NC
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Yellow/purple	NC
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White/purple	NC
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Shield	FG
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Note) Connect unused input cable to +COM(red) or don't connect to any cables.

Note) Connect unused output cable to -COM(gray) or don't connect to any cables.

- Connector(USB)

Binder 09-0431-81-04

