

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)

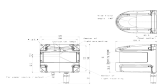
Note1) When operating trouble output, output 1, 2 & 3 show "existing detecting object" state.

Note) This model is not a safety rated product.

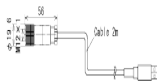
Note) Hokuyo products are not developed and manufactured for use in weapons, equipment, or related technologies intended for destroying human lives or creating mass destruction. If such possibilities or usages are revealed, the sales of Hokuyo products to those customers might be halted by the laws of 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

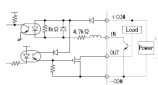
- sensor



- 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 |
| Brown | 10 to 30VDC |
| Blue | 0V |
| Green | Area input 1 |
| Yellow | Area input 2 |
| Purple | Area input 3 |
| White/yellow | Area input 4 |
| Orange | Trouble output |
| Black | Detection output 1 |
| White | Detection output 2 |
| White/blue | Detection output 3 |
| Red | COM for I/O(+COM) |
| Gray | COM for output(-COM) |
| Yellow/red | NC |
| Yellow/green | NC |
| Yellow/black | NC |
| Yellow/purple | NC |
| White/purple | NC |
| Shield | FG |

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

