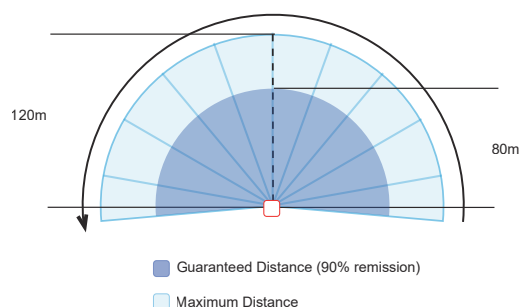


Area Detection Model

CE

UXM-30LAH-EWA



At a glance

- Max. range for data output : 120m
- Max. range for area detection : 80m
- NPN output
- 3 detection output
- 15 field sets are available
- Data output is available by Ethernet
- Multi-echo function is available
- Angular resolution 0.125°
- IP67 protection
- Size : W124xD126xH150mm
- Weight : 1200g

Type	Model	Maximum distance	Data output	Highest resolution
Detection output	UXM-30LAH-EWA	80m	○	0.125
	UXM-30LN-PW	30m	—	0.25
	URM-40LC-EWT	60m	○	0.125
	UXM-30LAH-EHA	80m	○	0.125
	UGM-50LAP/LAN	120m	○	0.08

Product description

- 2D laser scanner for object detection
- Distance and intensity data is available via Ethernet
- Equipped with fog filters, rain filters, the multi-echo function and sensitivity filters, it can reliably detect white objects (with 90% remission) up to a distance of 80 meters and black objects (with 10% remission) up to a distance of 30 meters
- It is ideal for outdoor applications such as ports and highways

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Specification		UXM-30LAH-EWA
Electronics	Supply voltage	10VDC to 30VDC
	Supply current	600mA or less (12VDC), 300mA or less (24VDC)
	Start-up time	Within 30sec
	Light source	Laser semiconductor (905nm), Laser class 1
Detection	Maximum distance (Area detection)	0.1m~80m
	Maximum distance (Data output)	0.1m~120m
	Guaranteed distance (w/ White 90% remission)	80m
	Guaranteed distance (w/ black 10% remission)	30m
	Distance accuracy	± 30mm (0.1 to 30m w/ white 90% remission, 1,000lux or less)
	Standard deviation	$\sigma < 10\text{mm}$ (0.1 to 30m w/ white 90% remission, 1,000lux or less)
	Angle	190°
	Scanning speed	50msec
	Angular resolution	0.125°
Function	Data output	Available by Ethernet communication
	PNP / NPN output	NPN
	No. of digital area output	3
	No. of digital area input	4 (15 area patterns and 1 laser off mode)
	Multi echo	Available
	LED indicator	1 x Green : power, 1 x Orange : area status
Interface / Software	Interface	Ethernet
	Area configuration	Configured by software
General	Ambient illuminance	100,000lx (Note : avoid direct sunlight)
	Ambient operating temperature and humidity	Temperature : -30~50°C (heater in use) Humidity : below 85%RH (without dew, frost)
	Vibration resistance	10 to 55Hz double amplitude of 1.5mm 55 to 200Hz 19.6m/s ² sweep of 2min
	Shock resistance	196m/s ² (20G)
	Insulation resistance	10M Ω / 500VDC
	IP protection	IP67
	Weight	1200g
	Size W x D x H (mm)	124 x 126 x 150
	Material	Optical window : Polycarbonate, Case : Aluminum
Standards	EMC	(EMI) EN61326-1:2013 EN55011:2009 + A1:2010 (EMS) EN61326-1:2013 EN61000-4-2:2009 EN61000-4-3:2006 + A1:2008 + A2:2010 EN61000-4-4:2012 EN61000-4-6:2009 EN61000-4-8:2010

Connection

Power source, I/O cable :

Cable length 2000mm flying lead

Color	Function
Brown	+VIN (10VDC to 30VDC)
Blue	-VIN
White / Red	Area input 1
White / Blue	Area input 2
White / Green	Area input 3
White / Black	Area input 4
White	Synchronous input
Orange	Malfunction output

Color	Function
Pink	Detection output 1
Violet	Detection output 2
Yellow / Black	Detection output 3
Green	Synchronous output
Yellow	Synchronous master output
Red	COM +
Black	COM -
Gray	Non connection

Ethernet connector :

4 core connector socket (Binder / Model No. 09-0431-87-04)

[Option connector]

UXM-CN01 : Straight connector (Binder / Model No.99-0430-57-04)

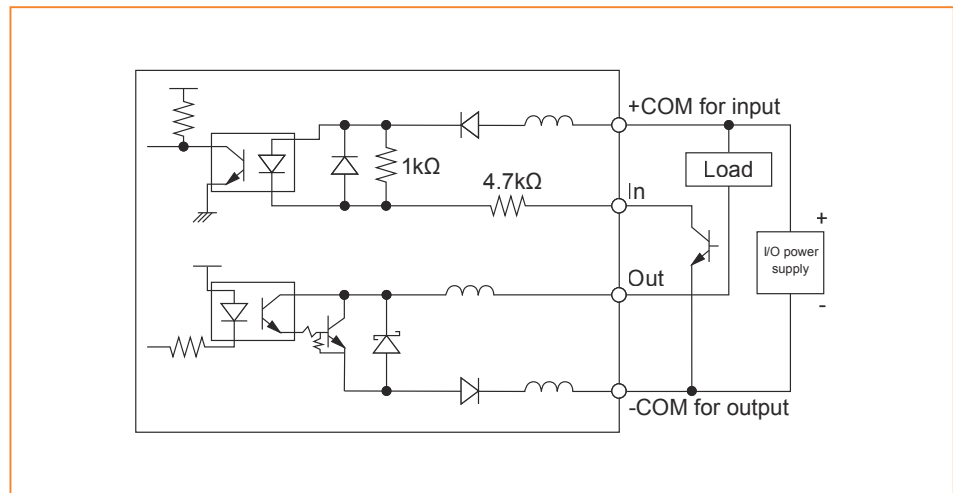
UXM-CN02 : L-shaped connector (Binder / Model No.99-0430-69-04)

Input states and corresponding area number

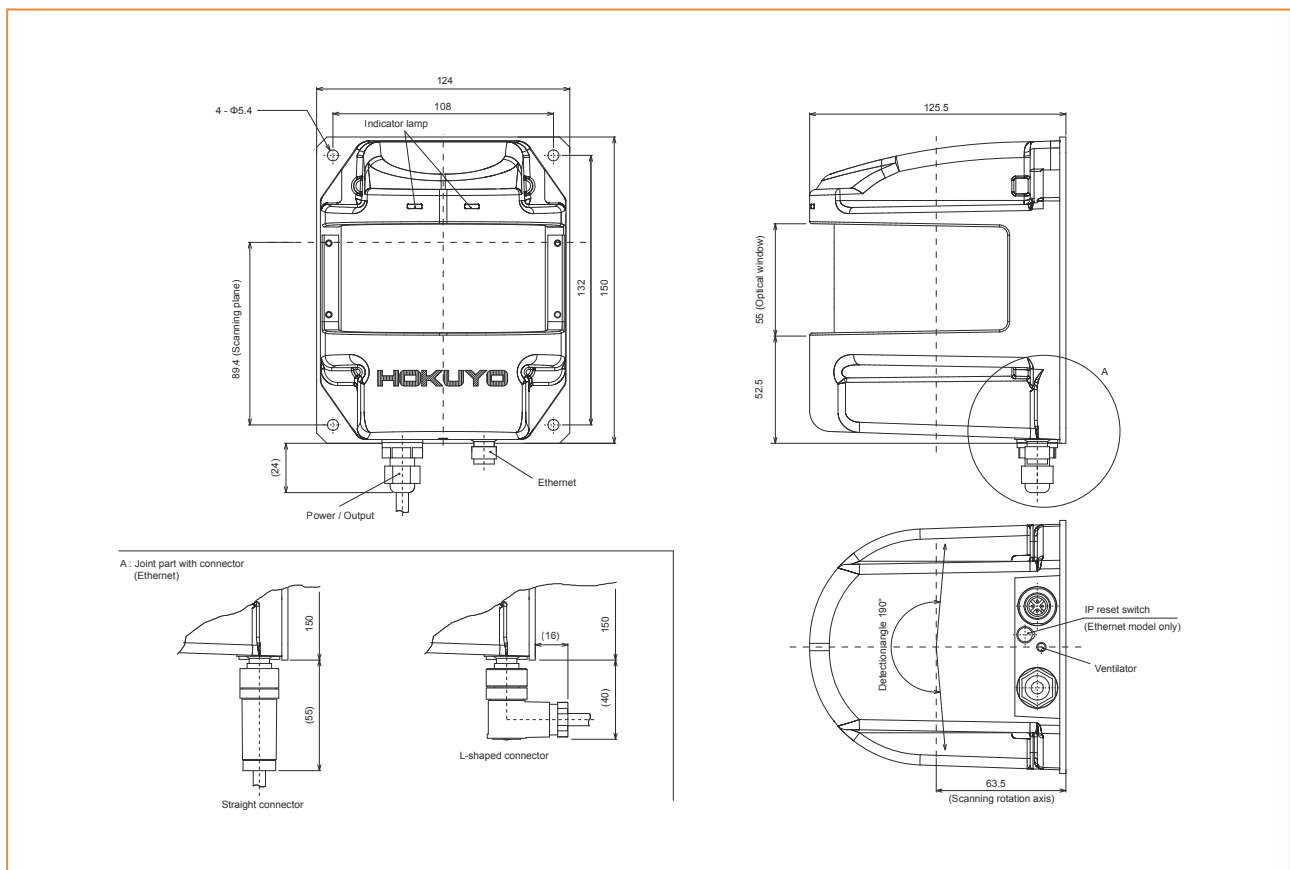
Input 1	Input 2	Input 3	Input 4	Area number
ON	ON	ON	ON	Laser off
OFF	ON	ON	ON	Area 1
ON	OFF	ON	ON	Area 2
OFF	OFF	ON	ON	Area 3
ON	ON	OFF	ON	Area 4
OFF	ON	OFF	ON	Area 5
ON	OFF	OFF	ON	Area 6
OFF	OFF	OFF	ON	Area 7

Input 1	Input 2	Input 3	Input 4	Area number
ON	ON	ON	OFF	Area 8
OFF	ON	ON	OFF	Area 9
ON	OFF	ON	OFF	Area 10
OFF	OFF	ON	OFF	Area 11
ON	ON	OFF	OFF	Area 12
OFF	ON	OFF	OFF	Area 13
ON	OFF	OFF	OFF	Area 14
OFF	OFF	OFF	OFF	Area 15

I/O circuit



External dimension



Option

Ethernet connector

Model	Code	Ref.
UXM-CN01	UZ00024	Straight shaped connector
UXM-CN02	UZ00025	L-shaped connector