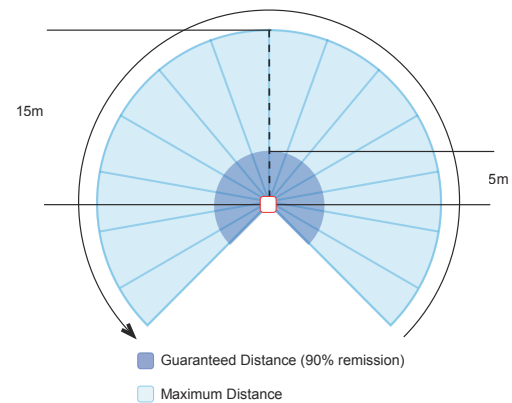




CE
UST-05LX



At a glance

- Max. range for data output : 15m
- Angular resolution : 0.25°
- Data output is available by Ethernet
- Compact (size : W50xD50xH70mm, weight : 130g)

Type	Model	Guaranteed distance	Highest resolution	Multi echo
Data output	UST-05LX	5m	0.25°	—
	UST-10LX	10m	0.25°	—
	UST-10LX-H01	10m	0.125°	—
	UST-15LX	15m	0.125°	○

Product description

- 2D laser scanner for data output
- Distance and intensity data is available via Ethernet
- Compatible with ROS1 and ROS2
- The software library is available online for free
- Compact. Easy to install in AMRs and other applications
- Fast scanning speed (25msec) and high angular resolution (0.25°)

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Specification		UST-05LX
Electronics	Supply voltage	12VDC / 24VDC (operation range 10 to 30V)
	Supply current	150mA or less (24VDC)
	Start-up time	Within 10sec
	Light source	Laser semiconductor (905nm), Laser class 1
Detection	Maximum distance (Data output)	0.06m~15m
	Guaranteed distance (w/ white 90% remission)	5m
	Guaranteed distance (w/ black 10% remission)	2m
	Distance accuracy	± 40mm (0.06 to 5m w/ white 90% remission)
	Standard deviation	$\sigma < 30\text{mm}$ (0.06 to 5m w/ white 90% remission)
	Angle	270°
	Scanning speed	25msec
	Angular resolution	0.25°
Function	LED indicator	1 x Blue : Blinks during start up and malfunction state
Interface / Driver	Interface	Ethernet
	Driver	ROS1 / ROS 2
General	Ambient illuminance	80,000lx (Note : avoid direct sunlight)
	Ambient operating temperature and humidity	Temperature : -10~50°C Humidity : below 85%RH (without dew, frost)
	Storage temperature and humidity	Temperature : -30~70°C Humidity : below 85%RH (without dew, frost)
	Vibration resistance	10 to 55Hz double amplitude of 1.5mm 55 to 200Hz 98m/s ² sweep of 2min
	Shock resistance	196m/s ² (20G)
	Insulation resistance	10M Ω / 500VDC
	IP protection	IP65
	Weight	130g
	Size W x D x H (mm)	50 x 50 x 70
	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 1000mm flying lead

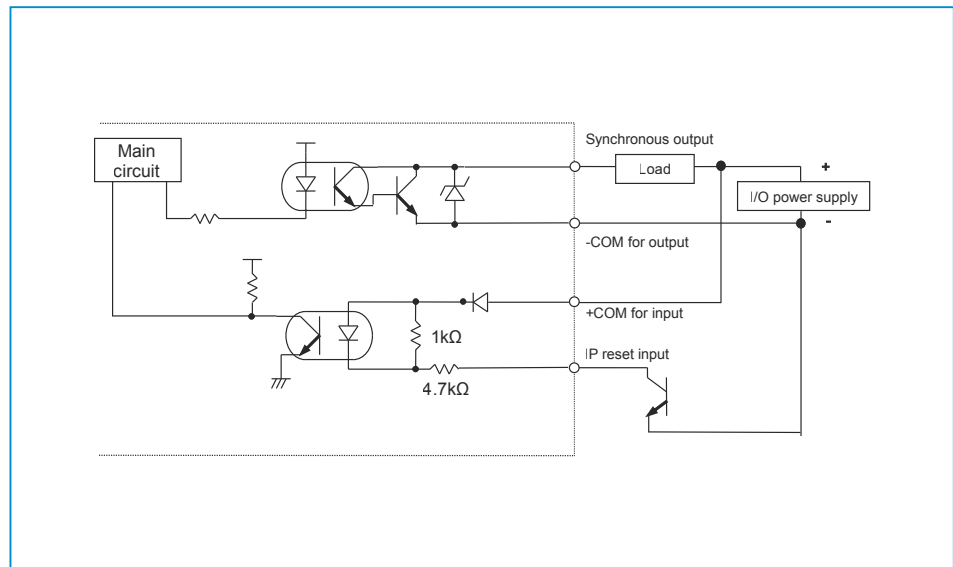
Color	Function
Red	COM +
Gray	COM -
Light blue	IP reset input
Orange	Synchronous output
Brown	+VIN (12VDC / 24VDC)
Blue	-VIN

Ethernet cable :

Connector : RJ45

Cable length 300mm

I/O circuit



External dimension

