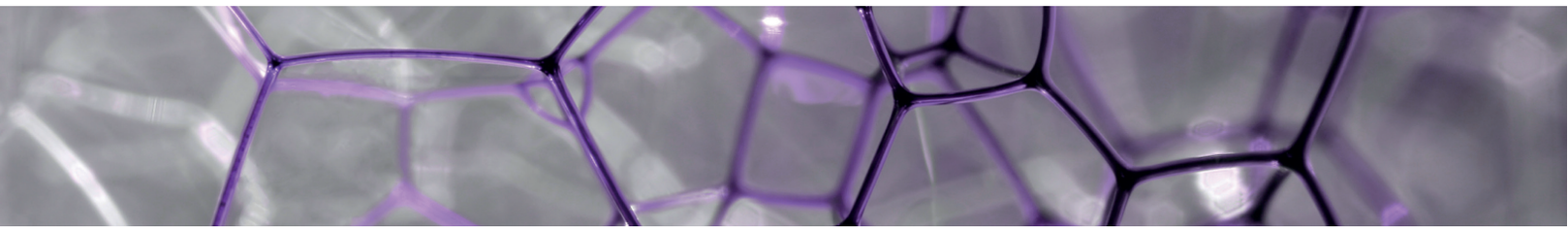

LIDAR SENSOR

XQ range

The Nexmosphere XQ range utilizes advanced technologies to offer sensors that create interactive planes. This allows you to create immersive environments where any area or surface can be made interactive and become part of the experience you create. Whether you want to create an interactive product section in a supermarket or make projected content on a wall interactive, the XQ range has the sensor to achieve your project objectives.

Lidar sensor

The Lidar sensor generates a 2D 360° virtual detection surface around itself. Within this area, activation zones can be defined that trigger when an object enters the detection surface within the specified zone. The sensor is versatile and can be mounted in any orientation, allowing for the creation of vertical, horizontal, or diagonal surfaces.

Features

- Ultra-fast object detection
- Up to 24 configurable Activation zones
- Large 360° Field of View
- Live object count per Activation zone

X-talk

The XQ Lidar sensor can easily be connected to any of the Nexmosphere Xperience controllers using the X-talk interface. All settings of the XQ sensor are programmable on the controller, enabling seamless integration in your application.

- Plug and smile interface
- Compatible with any Nexmosphere Xperience controller
- Powered by and programmable with Nexmosphere Xperience controller

Object detection with Activation zones

The XQ Lidar sensor can be configured with up to 24 Activation zones, which can be located anywhere in the sensor's Field of View. Each time an object enters or exits an Activation zone, an API message is generated. This feature can be used for a wide variaty of applications such as Lift & Learn, interactive touchpoints or Approach & Learn.

- 24 customizable Activation zones of any size
- Adjustable settings per activation zone, such as the minimum and maximum size of the objects
- Immediate trigger of API message upon object detection

Object count per Activation zone

The Lidar sensor can detect multiple objects simultaneously per Activation zone, as long as the objects don't overlap from the perspective of the sensor. With object-count enabled, the sensor provides a real-time count of the number of objects per Activation zone. When the sensor is applied for presence-sensing applications, this feature can be a valuable tool for generating footfall data.

- Detects multiple objects simultaneously
- Provides live count of the number of objects per zone

Benefits

- Multiple installation orientations facilitate a broad range of applications
- Customizable Field-of-Interest offers the flexibility to use or ignore any part of the 360° Field of View
- Smart algorithms for obstruction detection

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XQ - L-SERIES LIDAR SENSORS

Mounting specifications
Mount in such a way that the optical window (top circular part) of the sensor has a clear view towards the area of interest.

Thermal specifications
Operating temperature: +10'C...+40'C/ +50'F ... +104'F
Storage temperature: -20'C...+50'C/ -4'F ... +122'F

Electrical specifications
Operating voltage: 5V DC (via X-talk interface)
Power consumption: XQ-L2: 250mA
Power peak: XQ-L2 2A at startup

IR Emitter: 905nm invisible laser
Laser classification: Class 1

Sensor specifications

	XQ-L2
Field of View	360°
Detection range	5m
Frequency	10Hz
Angle resolution	0.7°
Min. object size	±10mm @<1m ±200mm @>4m
Distance accuracy	±20mm @<2m ±30mm @≥2m
Lifetime	10K hours

Miscellaneous
• Custom cable lengths available on request
• 2 year warranty (optional 3 year extended warranty available)

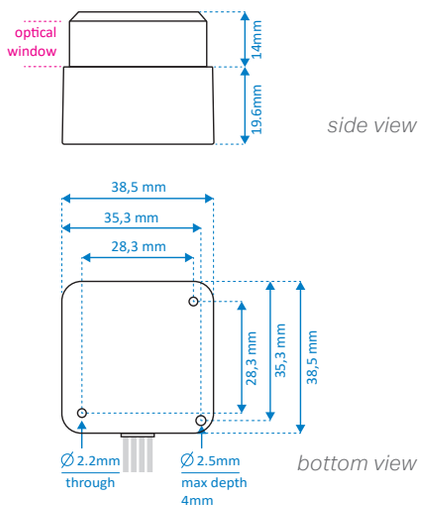
Packaging
Items per carton 1, 10 or 50 pcs

Standards and Certifications
CE RoHS compliant

UL certification pending

Mechanical dimensions
LxWxH: XQ-L2 sensor: 38.5 x 38,5 x 33.6 mm
Fixation: XQ-L2 sensor: 2.2mm bolts

XQ-L2



Ordering information

Product ID	*Description*	*Netto weight*	*Quantity*
XQ-L2	Lidar sensor, 360° , 5m range, 10K hours, 180cm cable	73g	1 pc

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