

Medium-Long Range Laser Displacement Sensor LM2-Q Series



CE

IO-Link

Ask SENPUM

+86-755-83330055

Fast Delivery Standard Models



Most products are in stock. Upon receiving your order, we will arrange prompt shipment to minimize your downtime-related costs and losses.



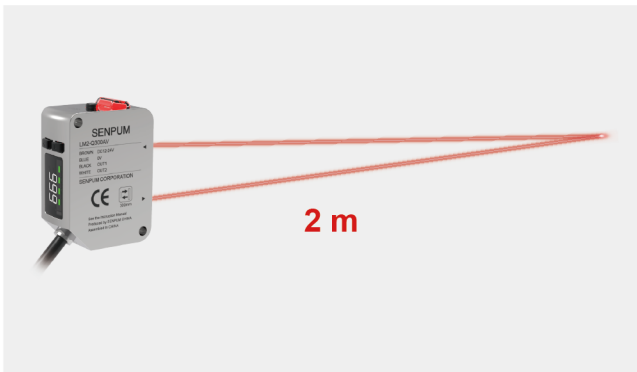
Ultra-high precision, accurately and stably detecting on multiple occasions

Linear accuracy up to $\pm 0.1\%$ F.S., maximum repeatability up to $10\text{ }\mu\text{m}$.

Linear accuracy up to
 $\pm 0.1\%$ F.S

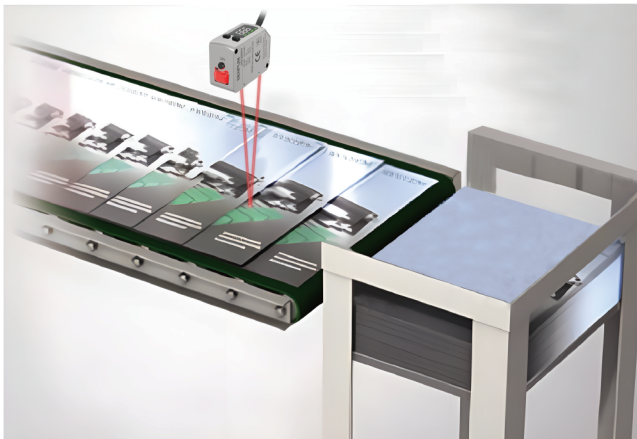
Repeatability accuracy up to
 $10\text{ }\mu\text{m}$

Detection distance up to 2 m, supporting various applications



Stable inspection even when the color of the workpiece changes

Counting and stacking detection of stacking box devices.



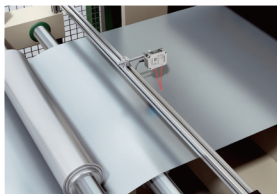
High-definition digital display and status indicators

High-definition digital display and status indicator lights, clearly showing measurement value changes and mode adjustment processes.

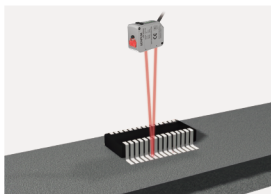
More Features

- NPN/PNP switchable.
- Integration of sensor head and amplifier, ultra-small size, simple and easy installation.
- With switching output, the upper and lower limit positions are easier to set.
- Analog output 4–20 mA or 0...5 V or 0...10 V, freely convertible.

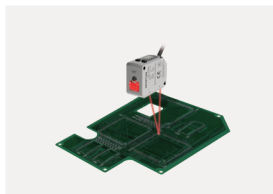
Applications



Sheet metal tracking



Pin Inspection



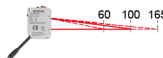
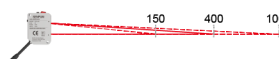
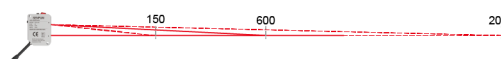
Substrate warpage and thickness

Product List

Cable Type

Diffuse reflective	Appearance	Schematics	Detection distance (mm)	Repeat-ability	Output method	Model
Short-range type			25–45	10 μm	NPN/PNP Analog voltage/current	LM2-Q045AV
			NPN/PNP RS-485		LM2-Q045T	
		35–80	30 μm	NPN/PNP Analog voltage/current	LM2-Q080AV	
		NPN/PNP RS-485		LM2-Q080T		
Medium-range type			60–165	70 μm	NPN/PNP Analog voltage/current	LM2-Q165AV
			NPN/PNP RS-485		LM2-Q165T	
			100–400	200 μm	NPN/PNP Analog voltage/current	LM2-Q400AV
			NPN/PNP RS-485		LM2-Q400T	
Long-range type		150–1000	0.5 mm	NPN/PNP Analog voltage/current	LM2-Q1000AV	
		NPN/PNP RS-485		LM2-Q1000T		
		150–2000		NPN/PNP Analog voltage/current	LM2-Q2000AV	
		NPN/PNP RS-485		LM2-Q2000T		

Relay Type

Diffuse reflective	Appearance	Schematics	Detection distance (mm)	Repeat-ability	Output method	Model
Short-range type			25–45	10 μm	NPN/PNP Analog voltage/current	LM2-Q045CAAV
					NPN/PNP RS-485	LM2-Q045CAT
Medium-range type			35–80	30 μm	NPN/PNP Analog voltage/current	LM2-Q080CAAV
					NPN/PNP RS-485	LM2-Q080CAT
			60–165	70 μm	NPN/PNP Analog voltage/current	LM2-Q165CAAV
					NPN/PNP RS-485	LM2-Q165CAT
			100–400	200 μm	NPN/PNP Analog voltage/current	LM2-Q400CAAV
					NPN/PNP RS-485	LM2-Q400CAT
Long-range type			150–1000	0.5 mm	NPN/PNP Analog voltage/current	LM2-Q1000CAAV
					NPN/PNP RS-485	LM2-Q1000CAT
			150–2000		NPN/PNP Analog voltage/current	LM2-Q2000CAAV
					NPN/PNP RS-485	LM2-Q2000CAT

Cable (sold separately)

Appearance	Sensor side	Cable termination	Material	Output method	Cable length	Model
	M8 6PIN	Loose wire	PVC	Analog	2 m	OW-LM2Q2000
				RS-485		OW-LM2QT2000
				Analog	5 m	OW-LM2Q5000
				RS-485		OW-LM2QT5000
				Analog	10 m	OW-LM2Q10M
				RS-485		OW-LM2QT10M

Laser Displacement Sensors

LM2-Q
LM2-H
LM
LS
LM-S

- Fiber Optic Sensors
- Photoelectric Sensors
- Color Sensors
- Laser Sensors
- Proximity Sensors
- Precision Contact Sensors
- Area Sensors/ Safety Light Curtains
- Laser Scanners
- Digital Contact Sensors

Laser Displacement Sensors

- Laser Micrometers
- Confocal Displacement Sensors
- Barcode Readers
- AI Vision Sensors
- RFID
- Infrared Temperature Sensors
- Pressure Sensors
- Flow Sensors
- Magnetic Sensors
- Ultrasonic Sensors
- Magnetic Scales
- Static Eliminators



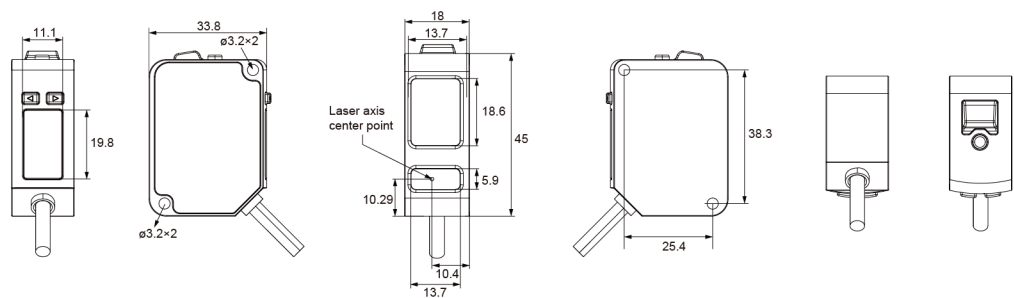


Dimensions

Cable Type

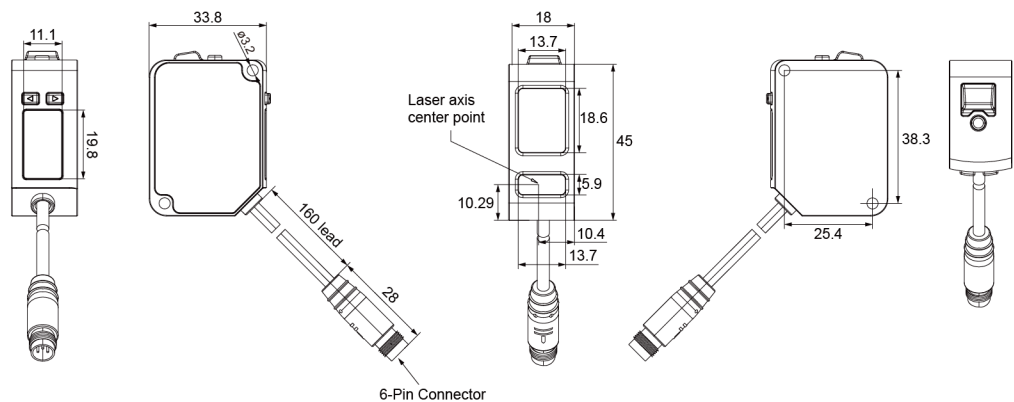
LM2-Q045T/080T/165T/400T/1000T/2000T
LM2-Q045AV/080AV/165AV/400AV/1000AV/2000AV

Unit: mm

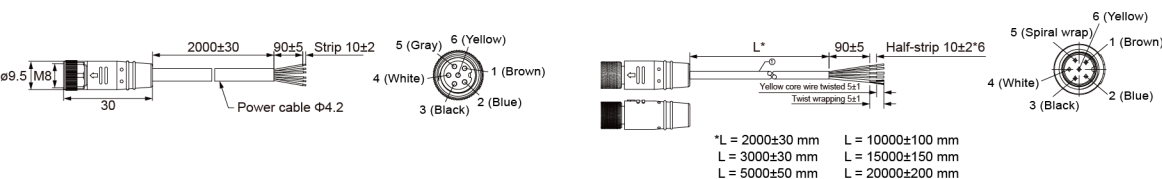


Relay Type

LM2-Q045CAT/080CAT/165CAT/400CAT/1000CAT/2000CAT
LM2-Q045CAAV/080CAAV/165CAAV/400CAAV/1000CAAV/2000CAAV



Cable (sold separately)

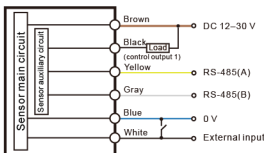


I/O Circuit Diagrams

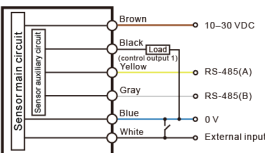
RS-485

LM2-Q045T/080T/165T/400T/1000T/2000T
LM2-Q045CAT/080CAT/165CAT/400CAT/1000T/2000CAT

When selecting NPN output, NPN input



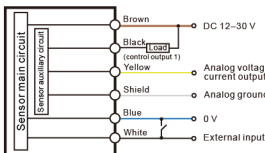
When selecting PNP output, NPN input



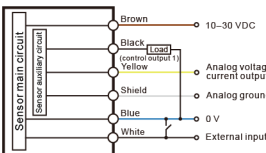
Analog

LM2-Q045AV/080AV/165AV/400AV/1000AV/2000AV
LM2-Q045AV/080CAAV/165CAAV/400CAAV/1000CAAV/2000CAAV

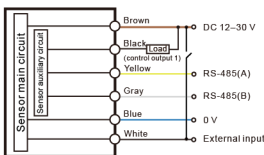
When selecting NPN output, NPN input



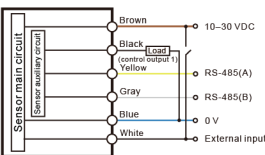
When selecting PNP output, NPN input



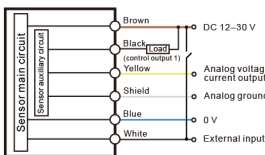
When selecting NPN output, PNP input



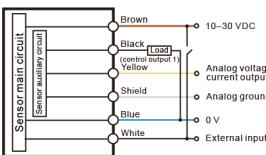
When selecting PNP output, PNP input



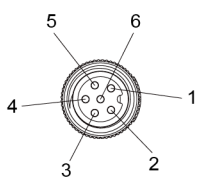
When selecting NPN output, PNP input



When selecting PNP output, PNP input



Connector Schematic



485 Output type

	Jacket color	Function
1	Brown	Power supply positive
2	Blue	Power supply negative
3	Black	Control output / IO-Link
4	White	Control input
5	Gray	RS485(B)
6	Yellow	RS485(A)

Analog output type

	Jacket color	Function
1	Brown	Power supply positive
2	Blue	Power supply negative
3	Black	Control output / IO-Link
4	White	Control input
5	Shield	Analog ground
6	Yellow	Analog voltage/current output

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LM2-H
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LM-S

Fiber Optic Sensors

Photoelectric Sensors

Color Sensors

Laser Sensors

Proximity Sensors

Precision Contact Sensors

Area Sensors/
Safety Light Curtains

Laser Scanners

Digital Contact Sensors

Laser Displacement
Sensors

Laser Micrometers

Confocal Displacement
Sensors

Barcode Readers

AI Vision Sensors

RFID

Infrared Temperature
Sensors

Pressure Sensors

Flow Sensors

Magnetic Sensors

Ultrasonic Sensors

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