


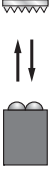


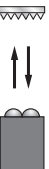







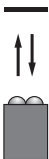





Opposed / Retroreflective Mode (non-polarized/polarized)

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
 <p>Opposed Mode Sensing range: 4m Visible red 660nm</p>	2m cable 	10-30V DC	Emitter	<u>UP-T4000D-EX6C3L2</u>
			NPN	<u>UP-T4000N-CX6C4U2</u>
			PNP	<u>UP-T4000P-CX6C4U2</u>
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	Emitter	<u>UP-T4000D-EX6P4LP</u>
			NPN	<u>UP-T4000N-CX6P4UP</u>
			PNP	<u>UP-T4000P-CX6P4UP</u>
 <p>Retroreflective Mode Sensing range: 2m (Note) Visible red 660nm</p>	2m cable 	10-30V DC	NPN	<u>UP-L2000N-CX6C4U2</u>
			PNP	<u>UP-L2000P-CX6C4U2</u>
			—	—
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	NPN	<u>UP-L2000N-CX6P4UP</u>
			PNP	<u>UP-L2000P-CX6P4UP</u>
			—	—
 <p>Polarized Retroreflective Sensing range: 1m (Note) Visible red 680nm</p>	2m cable 	10-30V DC	NPN	<u>UP-L1000N-CX6C4U2-PF</u>
			PNP	<u>UP-L1000P-CX6C4U2-PF</u>
			—	—
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	NPN	<u>UP-L1000N-CX6P4UP-PF</u>
			PNP	<u>UP-L1000P-CX6P4UP-PF</u>
			—	—

Note: Used with RE-6152 (supplied with sensor) reflector.
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle







Diffuse Mode

S : UP SERIES

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
 Diffuse Mode Sensing range: 200mm Visible red 680nm	2m cable 	10-30V DC	NPN	<u>UP-D0200N-CX6C4U2</u>
			PNP	<u>UP-D0200P-CX6C4U2</u>
			—	—
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	NPN	<u>UP-D0200N-CX6P4U2</u>
			PNP	<u>UP-D0200P-CX6P4U2</u>
			—	—
 Diffuse Mode (flush-front profile) Sensing range: 200mm Visible red 680nm	2m cable 	10-30V DC	NPN	<u>UP-D0200N-CX6C4U2-F</u>
			PNP	<u>UP-D0200P-CX6C4U2-F</u>
			—	—
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	NPN	<u>UP-D0200N-CX6P4U2-F</u>
			PNP	<u>UP-D0200P-CX6P4U2-F</u>
			—	—
 Divergent Diffuse Mode (wide-angle) Sensing range: 50mm Visible red 660nm	2m cable 	10-30V DC	NPN	<u>UP-D0050N-CX6C4U2-W</u>
			PNP	<u>UP-D0050P-CX6C4U2-W</u>
			—	—
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	NPN	<u>UP-D0050N-CX6P4U2-W</u>
			PNP	<u>UP-D0050P-CX6P4U2-W</u>
			—	—

Note:
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle
 — S-02 —

Convergent Mode

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
 Convergent Mode Sensing range: 10mm Spot size at focus: 1mm Visible red 660nm	2m cable 	10-30V DC	NPN	<u>UP-C0010N-CX6C4U2</u>
			PNP	<u>UP-C0010P-CX6C4U2</u>
			—	—
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	NPN	<u>UP-C0010N-CX6P4UP</u>
			PNP	<u>UP-C0010P-CX6P4UP</u>
			—	—
 Convergent Mode Sensing range: 20mm Spot size at focus: 1.75mm Visible red 680nm	2m cable 	10-30V DC	NPN	<u>UP-C0020N-CX6C4U2</u>
			PNP	<u>UP-C0020P-CX6C4U2</u>
			—	—
	4 Pin Pico-style 6" Pigtail QD 	10-30V DC	NPN	<u>UP-C0020N-CX6P4UP</u>
			PNP	<u>UP-C0020P-CX6P4UP</u>
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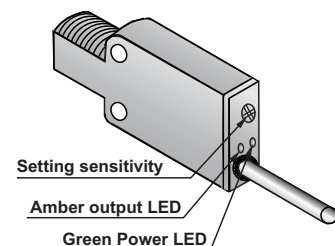
Note:
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle
 — S-03 —

Specifications

Supply Voltage	10 to 30V dc (10% maximum ripple) at less than 25mA, exclusive of load
Supply Protection Circuitry	Protected against reverse polarity and transient voltages
Output configuration	Solid state complementary (SPDT):NPN or PNP (current sinking or sourcing) output models available
Output Rating	150mA maximum each output at 25°C OFF- state leakage current: less than 10 μ A@ 30Vdc On-state saturation voltage: less than 2.0V@150mA
Output Protection Circuitry	Protected against false pulse on power-up and continuous overload or short circuit of outputs
Output Response	Opposed Mode: 8milliseconds ON,4 milliseconds OFF All others: 1.5 milliseconds Note:500millisecond delay on power-up, outputs do not conduct During this time
Repeatability	Opposed Mode: 1 millisecond All others: 175 microseconds
Adjustments	1-turn slotted GAIN(sensitivity)Adjustment Potentiometer.
Indicators	2 LEDs, visible from back and sides of sensor: 1Green, 1 Amber Green steady: power ON Amber steady: light sensed
Construction	Black polycarbonate/ABS alloy housing; totally encapsulated circuitry
Environmental Rating	IEC IP 67
Connections	2 M 4-wite PVC Cable, 9 m PVC cable, or 4 pin pico-style 150mm pigtail QD
Operating Conditions	Temperature: -20 to +55°C Relative Humidity: 90%@50 C (non-condensing)
EMC	IEC 60947-5-2, Parts 7.2.6.1. 2. 3 or RFI>3V/m(in 30-1000MHz), EFT>1KV, ESD>4KV(contact)
Voltage Withstand Ability	IEC 60947-5-2, Part 8.3.3.4 or 500VDC for one min, between all supply terminals connected together and enclosure
Insulation Resistance	>20M Ω , with 500V DC megger between all supply terminals connected together and enclosure
Vibration Resistance	IEC 60947-5-2, Part 7.4.2 or 10-55HZ, 1.0mm amplitude in x , y and z directions for 30 min
Shock Resistance	IEC 60947-5-2, Part 7.4.1 or 30g, 11ms in x , y and z directions for six time each
Mounting Bracket	Miniature-beam2-A1(See accessories)
Certifications	CE
Cable	2M 3.4 φ 4X0.15 (Emitter :2X0.15) PUR.
Pigtail Type	See Pigtail Series or our Cables & Connectors catalogue.

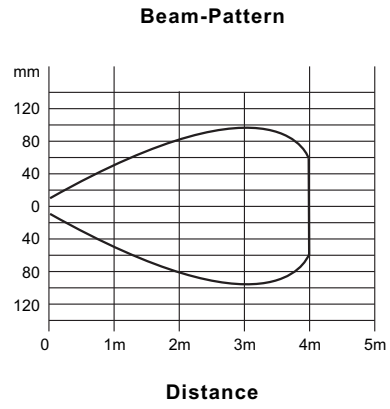
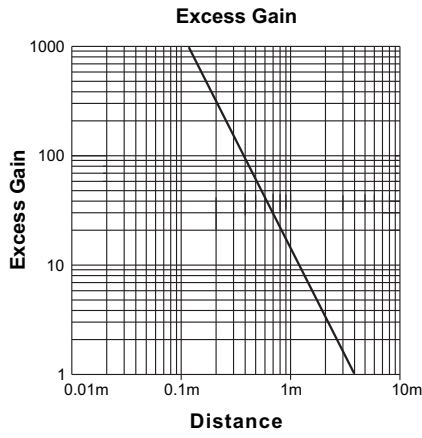
MINI-BEAM2 Features

- Designed after the popular MINI-BEAM , but only one-third the size of the original.
- 12mm threaded barrel on most models.
- Uses advanced miniaturized microprocessor-based circuitry.
- Available for opposed, retro reflective, diffuse, and convergent sensing modes.
- 10 to 30V dc operation.
- Complementary outputs (one normally open and one normally closed), each with 150mA switching capacity.
- IP 67 and NEMA 6 environmental ratings.
- Status indicators.
- Models with either integral, unterminated cable or 150mm pigtail with 4-pin Pico-style connector .

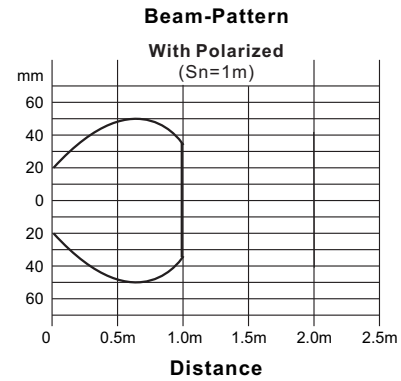
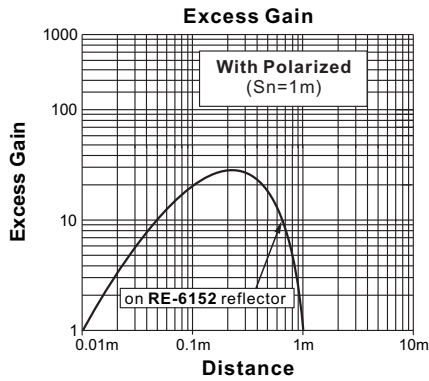
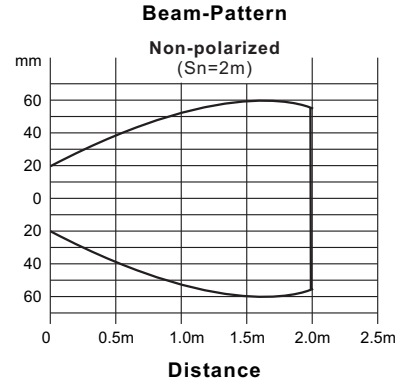
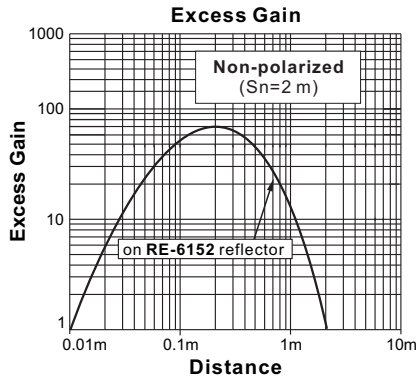


Sensing Characteristics (Typical)

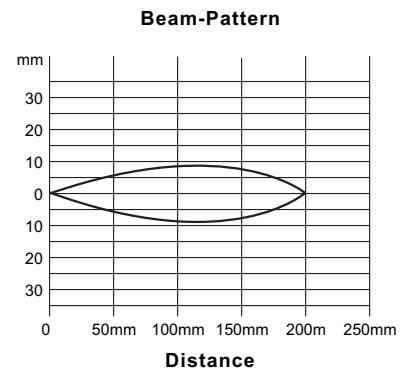
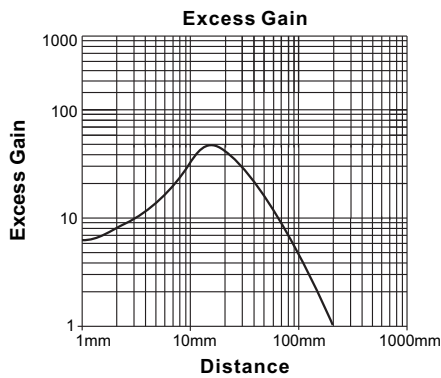
Opposed Mode (Sn=4m)



Retroreflective Mode



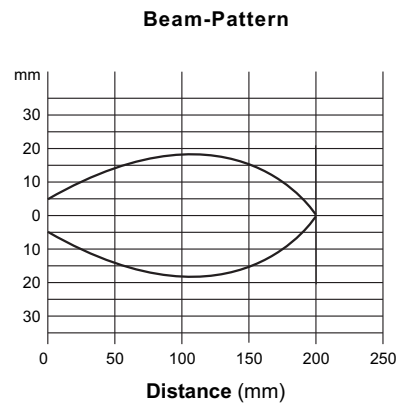
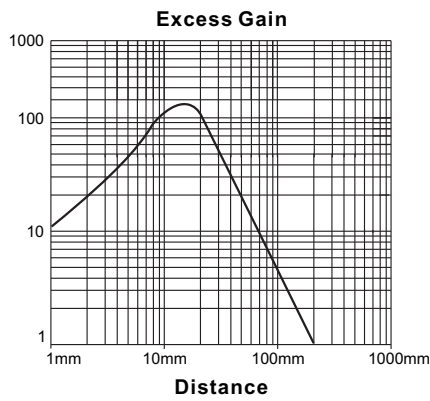
Standard Diffuse Mode (Sn=200mm)



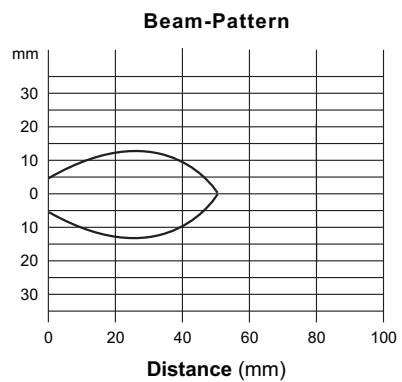
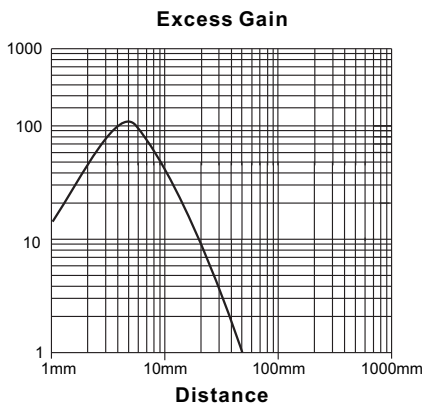
Sensing Characteristics (Typical)

S : UP SERIES

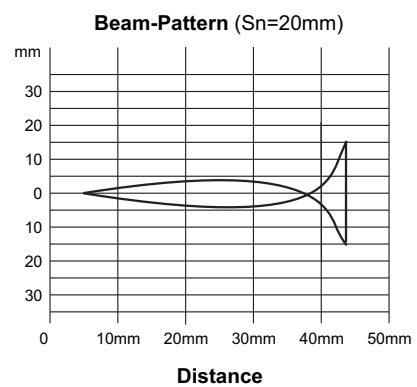
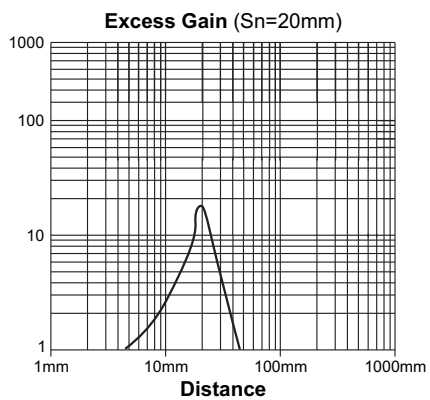
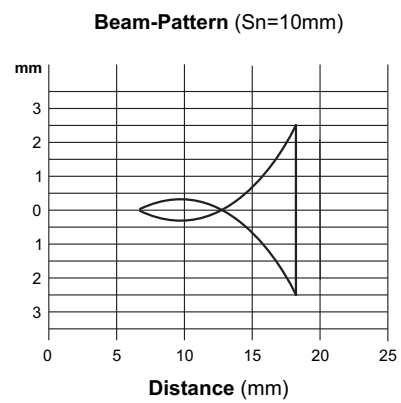
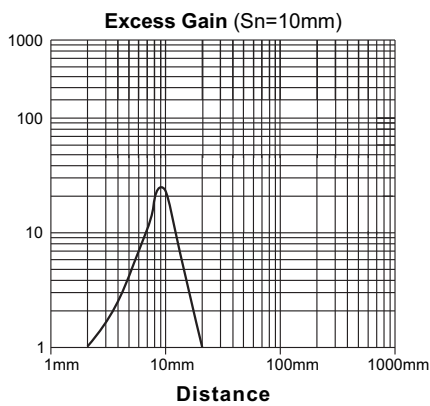
Diffuse (Flush-Front Profile Type, Sn=200mm)



Divergent Diffuse (Wide-Angle Type, Sn=50mm)



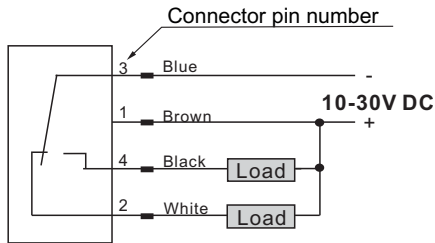
Converent mode



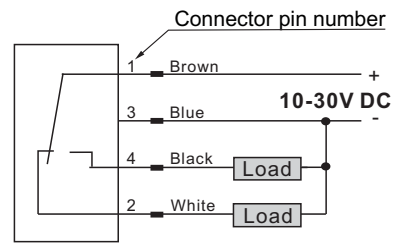
Connection Diagrams & Dimensions

Connection Diagrams

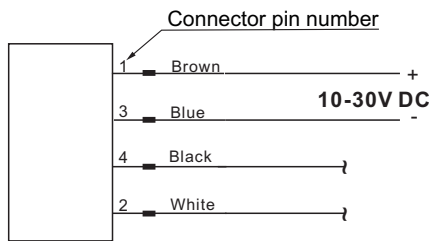
NPN output type



PNP output type



Emitter of Thru-beam Mode

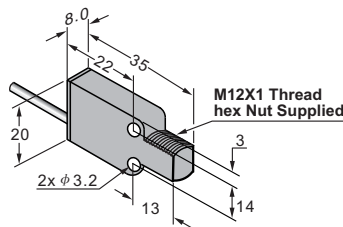


4-Pin Pico-Style Connector

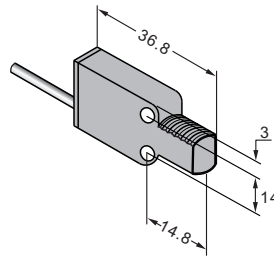


Dimensions (Unit: mm)

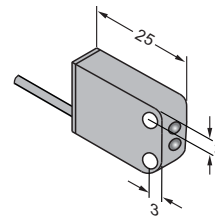
Retroreflective Mode/
Standard Diffuse Mode



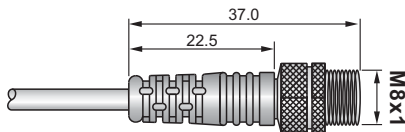
Opposed Mode/
Convergent Modes



Flush-front profile Diffuse/
Divergent Diffuse Mode

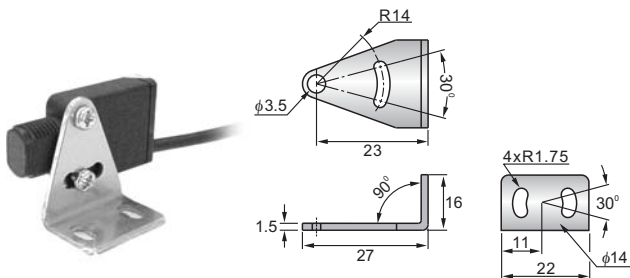


Pigtail* Type

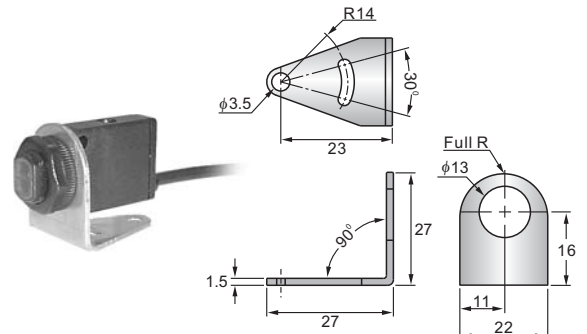


*: Please see **Pigtail Series** or our **Cables & Connectors** catalogue for more information.

MB-2722 (Sensor mounting bracket*-optional)



MB-2727 (Sensor mounting bracket*-optional)



*: Please see **Accessories** (Universal Mounting Brackets Series).