

55 Series Photoelectric Sensors

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Cutler-Hammer® 55 Series Photoelectric Sensors are identical to Eaton's 50 Series except without the interchangeable outputs or logic functions. They offer durability and high optical performance in a cost-effective, self-contained package. The 55 Series features sensors with AC and DC operation in a single unit. A relay option is available on these models that provides a 3 Amp SPDT relay output for high current switching.

Sensors are available that in thru-beam, reflex, polarized reflex, diffuse reflective and fiber optic sensing modes. Each sensor features a built-in swivel bracket for easy mounting and to allow precise adjustment of the sensor alignment.

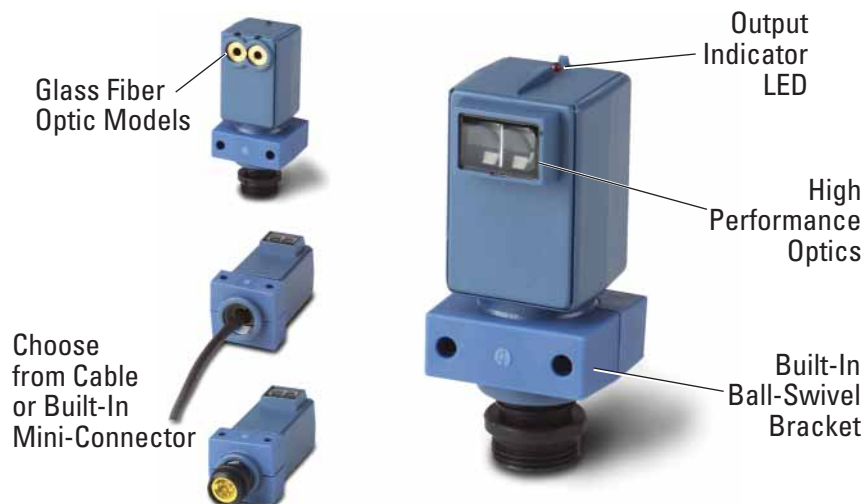
Approvals

- UL Listed
- CSA Certified



Unless otherwise noted, the products contained in this document are not designed or intended for use in human safety applications.

High Optical Performance and a Built-In Swivel Bracket for Easy and Precise Alignment



Product Features

- High optical performance includes 100-foot (30.5m) thru-beam range and 6-foot (1.8m) diffuse reflective range
- Both AC and DC operation in a single unit
- Short circuit protected solid-state outputs on AC/DC and DC-only versions (except thru-beam)
- Relay output option provides 3 Amp current switching on AC/DC models
- Thru-beam models feature an infrared sensing beam along with a visible red LED behind the lens in the source unit to aid in sensor alignment
- Fiber optic sensors operate in thru-beam or diffuse reflective mode depending on the fiber optic cable selected
- Glass fiber optic cables plug into NEMA 4 rated sockets on the front of the sensor. Sockets are leakproof even when the fiber optic cables are not plugged in
- Fully potted construction for use in areas subject to washdown, high shock and/or vibration
- Choice of pre-wired power cable or built-in mini-connector versions. Standard pre-wired cable length is 6 feet (1.8m)
- Built-in, patented, 360° rotation 10° tilt ball-swivel base

For Customer Service in the U.S. call **1-877-ETN CARE (386-2273)**,
in Canada call **1-800-268-3578**.
For Application Assistance in the U.S. and Canada
call **1-800-426-9184**.

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Model Selection — Sensors

	Operating Voltage	Sensing Range ①	Optimum Range ②	Field of View	Thru-Beam Component	Sensing Beam	Connection Type and output	Catalog Number	
								Light Operate	Dark Operate
Thru-Beam  Source Detector Minimum object size is 0.4 x 0.7 Inches (10 x 18 mm) For a complete system, order One Source and One Detector	115V AC	70 feet (21.3m)	0.1 – 35 feet (0.03 – 11m)	4 inch (102 mm) diameter at 100 inches (2540 mm)	Source	Infrared (with visible red LED to aid alignment)	6-foot Cable	1155A-6511	—
					Detector		2-pin Mini-Connector	1155A-6501 ☺	—
							6-foot Cable	1256A-6511	—
					3-pin Mini-Connector		1256A-6501 ☺☺	—	
		100 feet (30.5m)	0.1 – 50 feet (0.03 – 15m)	4 inch (102 mm) diameter at 100 inches (2540 mm)	Source		6-foot Cable	1155A-6511	—
					Detector		2-pin Mini-Connector	1155A-6501 ☺	—
							6-foot Cable	1255A-6511	—
					3-pin Mini-Connector		1255A-6501 ☺☺	—	
	230V AC	70 feet (21.3m)	0.1 – 35 feet (0.03 – 11m)	4 inch (102 mm) diameter at 100 inches (2540 mm)	Source	6-foot Cable	1155A-6512	—	
					Detector	2-pin Mini-Connector	1155A-6502 ☺	—	
						6-foot Cable	1256A-6512	—	
					3-pin Mini-Connector	1256A-6502 ☺☺	—		
		100 feet (30.5m)	0.1 – 50 feet (0.03 – 15m)	4 inch (102 mm) diameter at 100 inches (2540 mm)	Source	6-foot Cable	1155A-6512	—	
					Detector	2-pin Mini-Connector	1155A-6502 ☺	—	
						6-foot Cable	1255A-6512	—	
					3-pin Mini-Connector	1255A-6502 ☺☺	—		
	10 – 30V DC	70 feet (21.3m)	0.1 – 35 feet (0.03 – 11m)	4 inch (102 mm) diameter at 100 inches (2540 mm)	Source	6-foot Cable	1155A-6517	—	
					Detector	2-pin Mini-Connector	1155A-6507 ☺	—	
						6-foot Cable	1256A-6517	—	
					4-pin Mini-Connector	1256A-6507 ☺☺	—		
		100 feet (30.5m)	0.1 – 50 feet (0.03 – 15m)	4 inch (102 mm) diameter at 100 inches (2540 mm)	Source	6-foot Cable	1155A-6517	—	
					Detector	2-pin Mini-Connector	1155A-6507 ☺	—	
						6-foot Cable	1255A-6517	—	
					4-pin Mini-Connector	1255A-6507 ☺☺	—		
Standard Reflex  Retroreflector (Not Included) Sensor For a complete system, order Sensor and Retroreflector (See PG.05E.17.T.E)	20 – 264V AC or 15 – 30V DC	30 feet (9.1m)	0 – 15 feet (0 – 4.6m)	2 inch (51 mm) diameter at 100 inches (2540 mm)	—	Infrared	6-foot Cable	1455A-6513	1455AD6513
							6-foot Cable Relay Output	1455R-6513	1455RD6513
							3-pin Mini-Connector	1455A-6503 ☺☺	1455AD6503
							5-pin Mini-Connector Relay Output	1455R-6503 ☺☺☺	1455RD6503
	10 – 30V DC	30 feet (9.1m)	0 – 15 feet (0 – 4.6m)	2 inch (51 mm) diameter at 100 inches (2540 mm)	—	Infrared	6-foot Cable	1455A-6517	1455AD6517
							4-pin Mini-Connector	1455A-6507 ☺☺	1455AD6507

① Ranges based on 3-inch retroreflector for reflex sensors, 90% reflectance white card for diffuse reflective sensors.

② See Excess Gain graphs on **Page 4**.

☺☺☺☺ Fast turn product with typical one business day lead-time to shipment.

☺☺☺☺☺ See listing of compatible connector cables on **Page 4**.