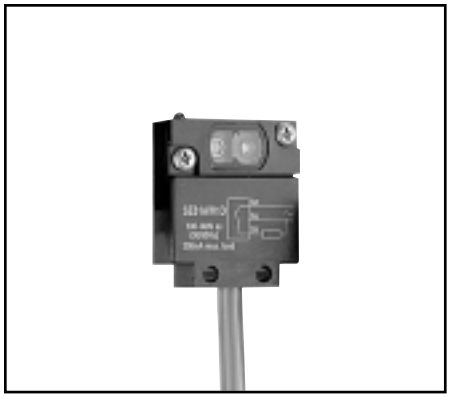
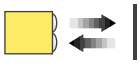
ECONO-BEAM® Diffuse-Mode Sensors

for 120V ac operation

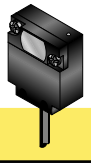


ECONO-BEAM® Diffuse-Mode Features

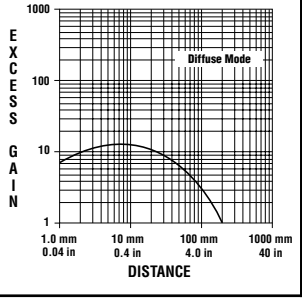
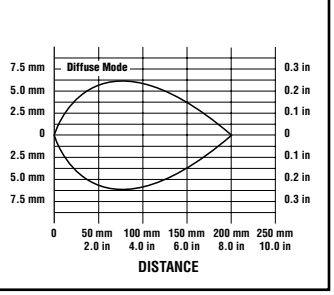
- Small, low-cost, self-contained sensors engineered to provide reliable sensing, primarily in straight-forward OEM applications
- Simple installation with no adjustments
- 200 mm (8") sensing range
- 120V ac operation
- Totally solid-state and epoxy-encapsulated for unlimited life
- SPST solid-state (FET) output switch rated at 300 milliamps
- Choose models for light operate or dark operate
- Very compact, yet rugged enough to withstand tough sensing environments; rated IP66, NEMA 4X
- 2 m (6.5') is standard cable length; 9 m (30') cables also available



Infrared, 880 nm



ECONO-BEAM Diffuse-Mode AC Models

Models	Range	Cable*	Supply Voltage	Output Type	Excess Gain	Beam Pattern
					Performance based on 90% reflectance white test card	
SE61AW1D	200 mm (8")	2 m (6.5')	120V ac	SPST Solid-state LO		
SE61RW1D		2 m (6.5')		SPST Solid-state DO		

*9 m (30') cables are available by adding suffix **"W/30"** to the model number of any cabled sensor (e.g. - **SE61AW1D W/30**)

WARNING . . . Not To Be Used for Personnel Protection

Never use these products as sensing devices for personnel protection. Doing so could lead to serious injury or death.

These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition. Consult your current Banner Safety Products catalog for safety products which meet OSHA, ANSI and IEC standards for personnel protection.

Printed in USA P/N 37429A0A

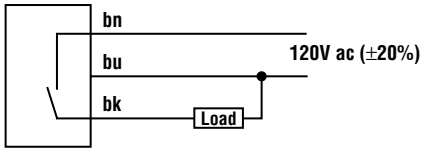
ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

ECONO-BEAM® – Diffuse AC Sensors

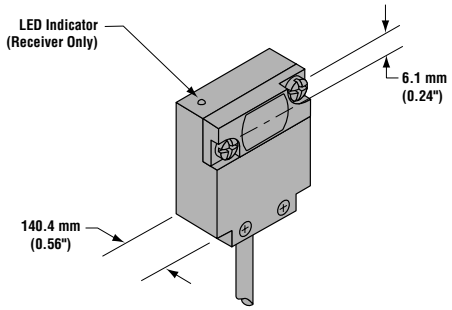
ECONO-BEAM AC Diffuse Specifications

Supply Voltage and Current	120V ac (±20%, 50-60 Hz)
Supply Protection Circuitry	Protected against transient voltages
Sensing Beam	Infrared, 880 nm
Output Configuration	Solid-state (FET). **SE61AW1 models:** normally open (light operate) **SE61RW1 models:** normally closed (dark operate)
Output Rating	Maximum steady-state load capability 300 mA to 50°C ambient (122°F) **Inrush capability:** 1 amp for 20 milliseconds (non repetitive) **Off-state leakage current:** less than 50 µA rms **On-state voltage drop:** ≤ 3 volts at 300 mA load, ≤ 2 volts at 15 mA load
Output Protection Circuitry	Protected against false pulse on power-up
Output Response Time	10 milliseconds ON and 10 milliseconds OFF Response time specification of load should be considered when important. (NOTE: 20 millisecond delay on power-up.)
Repeatability	2.3 milliseconds; independent of signal strength
Indicators	Red indicator LED on top of unit is ON whenever the sensor sees its modulated light source
Construction	Reinforced thermoplastic polyester housing, totally encapsulated and acrylic lenses
Environmental Rating	Meets NEMA standards 1, 2, 3, 3S, 4, 4X, 12, and 13; IEC IP66
Connections	PVC-jacketed 3-wire 2 m (6.5') or 9 m (30') cables
Operating Conditions	**Temperature:** 0° to 50°C (32° to 122°F) **Maximum relative humidity:** 90% at 50°C (non-condensing)
Certifications	

ECONO-BEAM AC Diffuse Hookup



ECONO-BEAM AC Diffuse Dimensions



BANNER®
the photoelectric specialist

WARRANTY: Banner Engineering Corp. warrants its products to be free from defects for one year. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.

Banner Engineering Corp., 9714 Tenth Ave. No., Minneapolis, MN 55441 • Phone: 888.373.6767 • http://www.baneng.com • Email: sensors@baneng.com