

Sensor Array Bar (Diffuse)



Datasheet



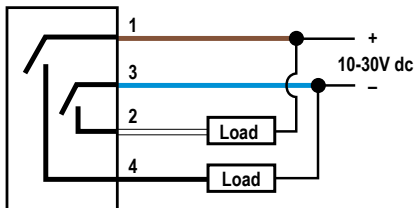
WARNING:

- Do not use this device for personnel protection
- Using this device for personnel protection could result in serious injury or death.
- This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A device failure or malfunction can cause either an energized (on) or de-energized (off) output condition.

Models

Model	Beams	Supply Current	Range (on 90% White Card)	Sensing Mode	Output	Connector
SAB-497AB1DS6-Q5E	6	150 mA	200 mm (8 in)	Diffuse, Infrared, 940 nm	Light Operate, Bipolar	150 mm (6 in) PVC cable with a 4-pin M12/Euro-style quick disconnect
SAB-998AB1DXL13-Q5E	13	325 mA	762 mm (30 in)			

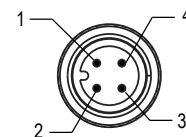
Wiring Diagram



Key

1. Brown
2. White
3. Blue
4. Black

4-Pin Male Connector



Specifications

Supply Voltage

10 V dc to 30 V dc (10% maximum ripple)

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Output Configuration

Solid-state Bipolar: NPN and PNP

Rating: 100 mA maximum each output at 25 °C

Off-state leakage current:

NPN: less than 200 μ A at 30 V dc

PNP: less than 10 μ A at 30 V dc

ON-state saturation voltage:

NPN: less than 1.6 V at 100 mA

PNP: less than 3.0 V at 100mA

Protected against output short-circuit, continuous overload, and false pulse on power-up

Wavelength

Infrared LED, 940 nm

Output Response

3 ms on/off

Operating Conditions

-20 °C to +55 °C (-4 °F to +131°F)

95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating

IEC IP50

Indicators

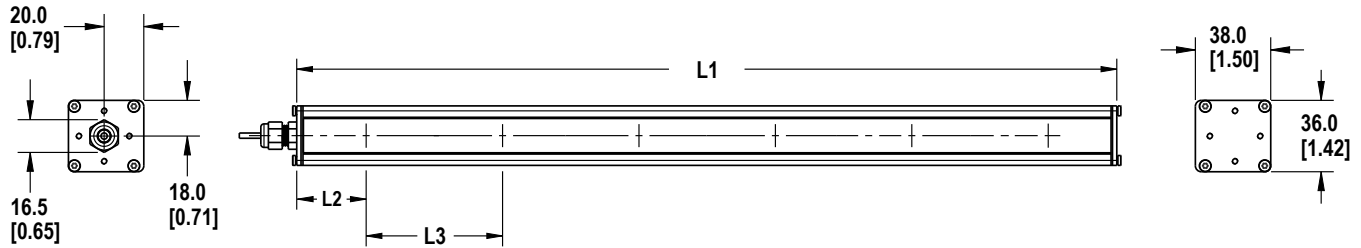
Green on: Power on

Amber on: Output on

Sensor Amber on: Light sensed



Dimensions



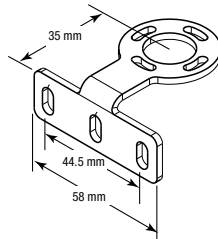
Length L1	First Beam L2	Beam to Beam L3
496.3 mm (19.5 in)	42.0 mm (1.7 in)	82.6 mm (3.25 in)
998 mm (39.3 in)	42.0 mm (1.7 in)	76.2 mm (3.00 in)

Accessories

Brackets

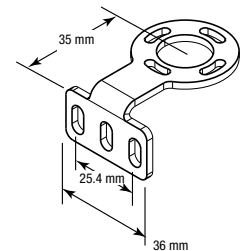
SMBSAB-IN

- Mounting bracket facing in
- 12 gauge steel



SMBSAB-OUT

- Mounting bracket facing out
- 12 gauge steel



Banner Engineering Corp. Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

For patent information, see www.bannerengineering.com/patents.