

## EZ-LIGHT™ Traffic Light

Indicators for signaling applications

### Features



- Preassembled indicators for signaling and traffic control
- Intense levels of light output for outdoor applications
- Sun shield included
- Controlled field of view for signage and narrow lane use
- Rugged, cost-effective and easy-to-install
- Compact devices are completely self-contained — no controller needed
- One, two or three indicators
- Immune to EMI and RFI interference
- Choose NPN or PNP input, depending on model
- Choose 15 to 30V dc or 85-130V ac operation

### Models

Models*	Indicators	LED Function**	Inputs	Construction	Connection
SP150GPQ	1	1 Color: Green	PNP/ NPN selectable	Flat or DIN-mount polycarbonate	4-pin Euro Integral QD
SP150RPQ		1 Color: Red			
SP150GRYPQ		3 Color: Green, Red, Yellow	PNP		
SP150GRYNQ			NPN		
SP150GA120		1 Color: Green	85 to 130V ac		Field-wired
SP150RA120		1 Color: Red			
SP250GRPQ	2	Top indicator: Red Bottom indicator: Green	PNP	Flat mount polycarbonate	4-pin Euro Integral QD
SP250GRNQ			NPN		
SP250GRA120			85 to 130V ac		Field-wired
SP350GYRPQ	3	Top indicator: Red Middle indicator: Yellow Bottom indicator: Green	PNP	Flat mount polycarbonate	4-pin Euro Integral QD
SP350GYRNQ			NPN		
SP350GYRA120			85 to 130V ac		Field-wired

\* For DC models, standard 4-pin Euro integral QD models are listed. AC models are field-wired only.

- For field-wired model, omit suffix **Q** from model number (example, “**SP150GP**”)
- A model with a QD requires a mating cable (see [Quick-Disconnect \(QD\) Cordsets](#) on page 7)

\*\* **1-color models:** 18 LEDs per color

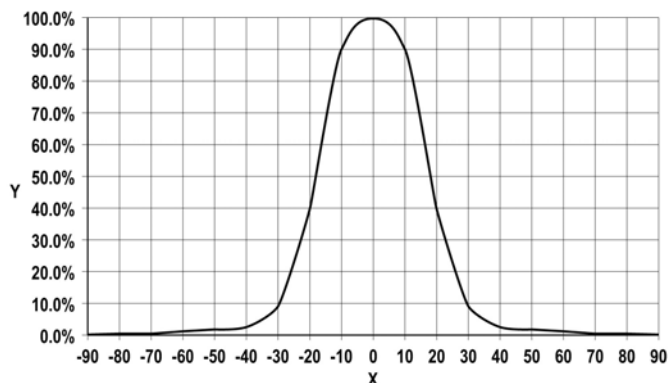
**3-color models:** 6 LEDs per color

Contact factory for other colors and color combinations.

## Specifications

Feature	Description	
<b>Supply Voltage and Current</b>	<b>DC models:</b> 15 to 30V dc <b>1-Color:</b> @ 120 mA max. per LED color <b>3-Color:</b> @ 40 mA max. per LED color	<b>AC models:</b> 85 to 130V ac or 75 to 120V dc @ 16 mA per LED color
<b>Indicators</b>	LED colors are independently selected, depending on model	
<b>Input Response Time</b>	<b>Indicator ON/OFF:</b> 10 ms (max.)	
<b>Environmental Rating</b> (See note 1)	Fully encapsulated; <b>Electronics :</b> IEC IP67 <b>Enclosure :</b> • <b>SP150:</b> IEC IP67 • <b>SP250:</b> IEC IP65 • <b>SP350:</b> IEC IP65	
<b>Connections</b>	Integral 4-pin Euro-style QD or field-wired model available for use with bulk cable (wire nuts included); ½-14 NPSM cord grip is optional for SP150 and SP250 models. Cord grip handles cable diameters from 4.3 to 11.4 mm (see model BWA-CG.5-1).	
<b>Operating Conditions</b>	-40° to +50° C (-40° to +122° F)	
<b>Application Notes</b>	1. Field-wired models must have cover screws tightened and use water tight compression fitting to meet environmental ratings.	

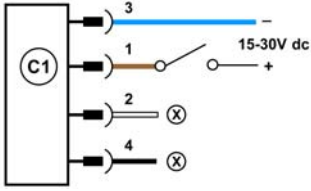
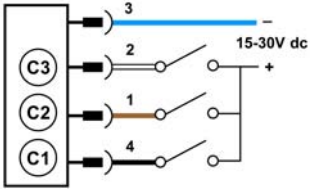
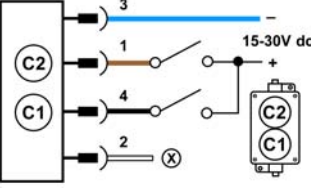
## Percent of Maximum Intensity vs Viewing Angle



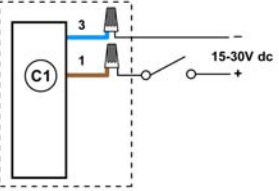
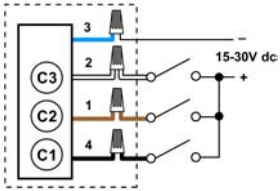
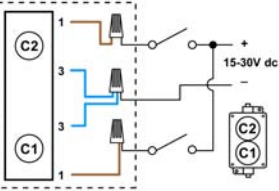
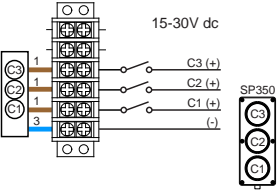
X: Viewing Angle (Deg)

Y: Intensity (Percent)

## PNP Hookups - QD Models

<p><b>SP150XPQ (1-Color Models)</b></p> 	<p><b>SP150XXXPQ and SP350XXXPQ (3-Color Models)</b></p> 
<p><b>SP250XXPQ (2-Color Models)</b></p> 	<p><b>Wiring Key:</b></p> <ul style="list-style-type: none"> <li>1 = Brown</li> <li>2 = White</li> <li>3 = Blue</li> <li>4 = Black</li> </ul> <ul style="list-style-type: none"> <li>⊗ indicates Not Used</li> <li>C1 = Color 1</li> <li>C2 = Color 2</li> <li>C3 = Color 3</li> </ul>

## PNP Hookups - Field-Wired Models

<p><b>SP150XP (1-Color Models)</b></p> 	<p><b>SP150XXXP (3-Color Models)</b></p> 	<p><b>Wiring Key:</b></p> <ul style="list-style-type: none"> <li>1 = Brown</li> <li>2 = White</li> <li>3 = Blue</li> <li>4 = Black</li> </ul> <ul style="list-style-type: none"> <li>C1 = Color 1</li> <li>C2 = Color 2</li> <li>C3 = Color 3</li> </ul>
<p><b>SP250XXP (2-Color Models)</b></p> 	<p><b>SP350XXXP (3-Color Models)</b></p> 	

**NPN Hookups - QD Models**

<b>SP150XPQ (1-Color Models)*</b>	<b>SP150XXXNQ and SP350XXXNQ (3-Color Models)</b>
*NPN functionality using 1-Color PNP model	
<b>SP250XXNQ (2-Color Models)</b>	<b>Wiring Key:</b>
	<p>1 = Brown</p> <p>2 = White</p> <p>3 = Blue</p> <p>4 = Black</p> <p style="text-align: right;">⊗ indicates Not Used</p> <p style="text-align: right;">C1 = Color 1</p> <p style="text-align: right;">C2 = Color 2</p> <p style="text-align: right;">C3 = Color 3</p>

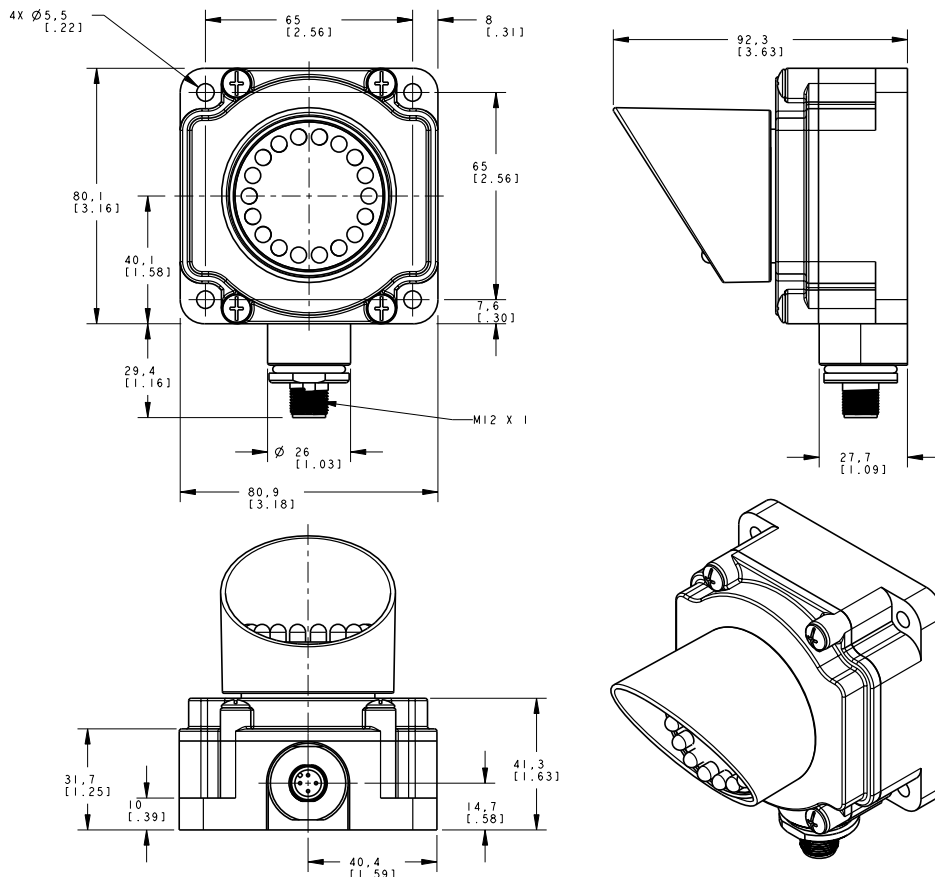
**NPN Hookups - Field-Wired Models**

<b>SP150XP (1-Color Models)*</b>	<b>SP150XXXN (3-Color Models)</b>	<b>Wiring Key:</b>
		<p>1 = Brown</p> <p>2 = White</p> <p>3 = Blue</p> <p>4 = Black</p> <p style="text-align: right;">C1 = Color 1</p> <p style="text-align: right;">C2 = Color 2</p> <p style="text-align: right;">C3 = Color 3</p>
*NPN functionality using 1-Color PNP model		
<b>SP250XXN (2-Color Models)</b>	<b>SP350XXXN (3-Color Models)</b>	

## AC Hookups

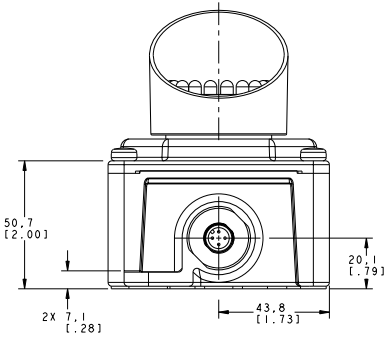
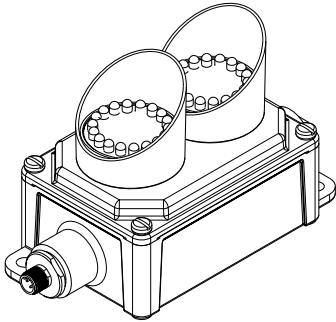
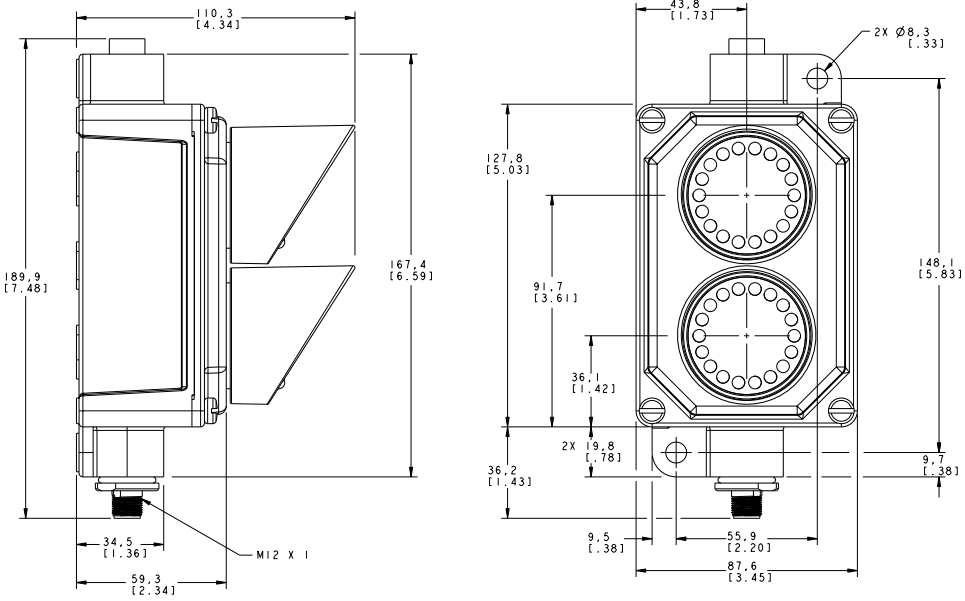
SP150XA120 (1-Color Models)	SP350XXXA120 (3-Color Models)
SP250XXA120 (2-Color Models)	Wiring Key:
	<p>2 = White</p> <p>4 = Black</p> <p style="margin-left: 200px;">C1 = Color 1</p> <p style="margin-left: 200px;">C2 = Color 2</p> <p style="margin-left: 200px;">C3 = Color 3</p> <p style="margin-left: 200px;">N = Neutral</p>

## Dimensions - SP150...Models\*



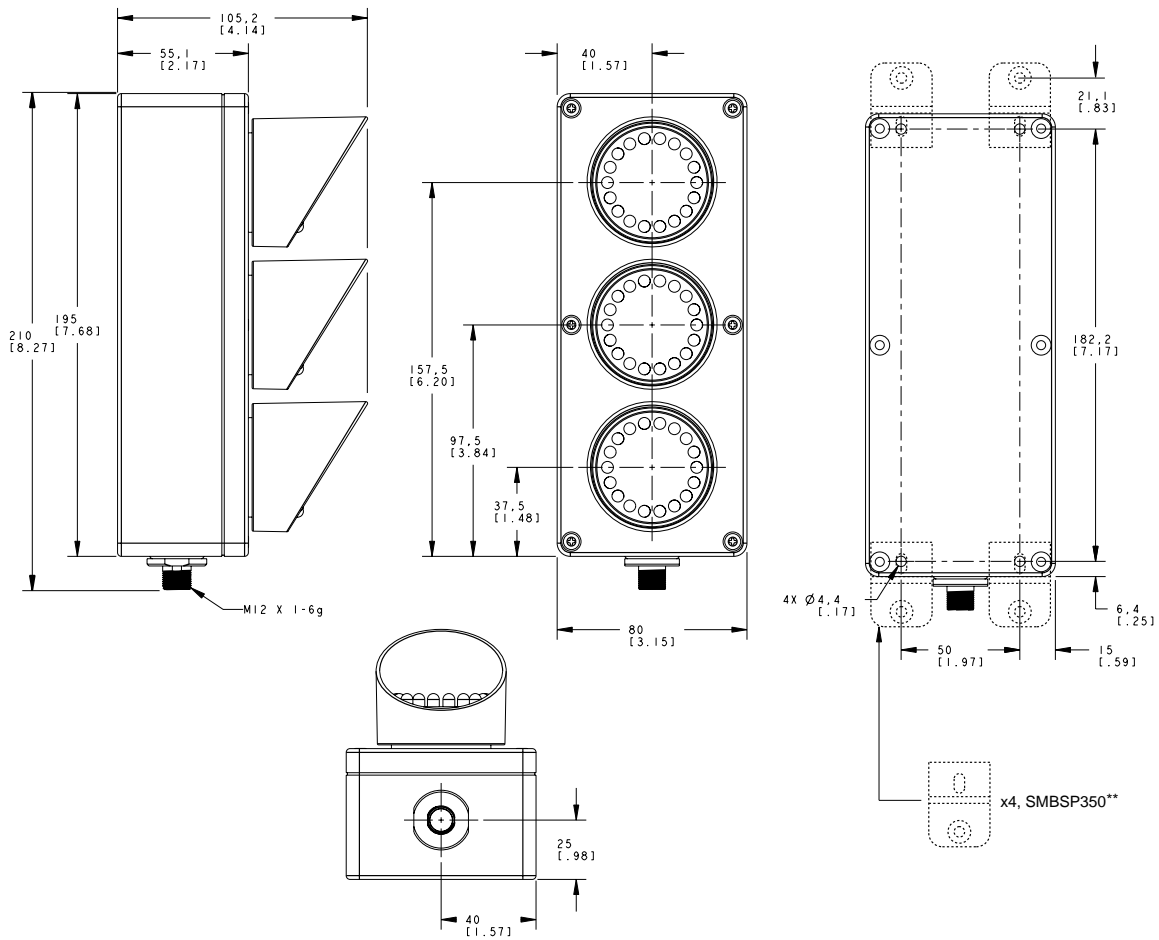
\* Field-wired models have ½" NPT port in place of M12 connector

**Dimensions - SP250...Models\***



\* Field-wired models have 1/2" NPT port in place of M12 connector

## Dimensions - SP350...Models\*

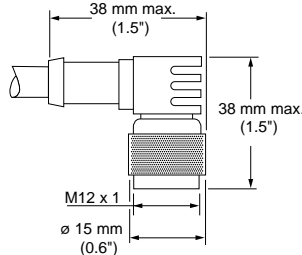


\* Field-wired models have access hole for ½" conduit fitting in place of M12 connector




\*\* Mounting kit SMBSP350 included

## Quick-Disconnect (QD) Cordsets

4-Pin Euro-Style Cables – Single-Ended				
Style	Model	Length	Dimensions	Pinout
4-pin Euro-style straight	<b>MQDC-406</b>	2 m (6.5')		
	<b>MQDC-415</b>	5 m (15')		
	<b>MQDC-430</b>	9 m (30')		

4-Pin Euro-Style Cables – Single-Ended				
Style	Model	Length	Dimensions	Pinout
4-pin Euro-style Right-angle	<b>MQDC-406RA</b>	2 m (6.5')		1 = Brown 2 = White 3 = Blue 4 = Black
	<b>MQDC-415RA</b>	5 m (15')		
	<b>MQDC-430RA</b>	9 m (30')		

## Mounting Brackets

Model		Features	Mounting System	
<b>Stainless Steel</b>	<b>Aluminum</b>	<ul style="list-style-type: none"> <li>Elevated-use stand-off pipe (½" NPSM/DN15)</li> <li>Polished 304 stainless steel or anodized aluminum surface</li> <li>½ NPT thread at both ends</li> <li>Compatible with most industrial environments</li> </ul>		
<b>SOP-E12-150SS</b> Length: 150 mm (6")	<b>SOP-E12-150A</b> Length: 150 mm (6")			
<b>SOP-E12-300SS</b> Length: 300 mm (12")	<b>SOP-E12-300A</b> Length: 300 mm (12")			
<b>SA-E12M30</b>		<ul style="list-style-type: none"> <li>Streamlined acetal mounting base adapter/cover</li> <li>Connects between ½" NPSM/DN15 pipe and 30 mm (1-3/16") drilled hole</li> <li>Mounting hardware included</li> </ul>		



### WARNING . . . Not To Be Used for Personnel Protection

**Never use this product as a sensing device for personnel protection. Doing so could lead to serious injury or death**

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