

EZ-LIGHT™

Traffic Lights

Indicators for Signaling Applications



Robust, Durable and Lean Design



- ▶ Long life LED technology
- ▶ Very low power consumption of less than 4W per color
- ▶ Robust housing with fully encapsulated electronics for use in wet and dirty environments
- ▶ Aesthetic shape that sheds debris and moisture
- ▶ Shock, vibration and impact resistant

Rugged and easy-to-install indicators provide high visibility in outdoor applications.

EZ-LIGHT™ Traffic Lights are preassembled with up to three indicator lights in one housing, making them cost-effective and easy-to-install. The rugged housing and intense levels of light output are an ideal solution for signaling, traffic control and other outdoor applications where highly visible indication is necessary.

- ▶ Preassembled indicators for signaling and traffic control
- ▶ Intense levels of light output for outdoor applications
- ▶ Controlled field of view for signage and narrow lane use
- ▶ Compact and completely self-contained—no controller needed
- ▶ Rugged, cost-effective and easy-to-install
- ▶ One, two or three indicators, with one or three colors
- ▶ High immunity to ambient electrical noise
- ▶ Models for flat or DIN-rail mounting, or for use with standoff pipe and adapters for elevated mounting
- ▶ 15 to 30V dc or 85 to 130V ac supply voltage, depending on model

40-plus years of sensor design experience, quality control, sales support and cost-effective solutions

- ▶ Banner quality products with global availability
- ▶ Rapid customization with most products shipping in 3 days or less
- ▶ Industry's largest force of application engineers to solve your toughest challenges
- ▶ More than 3,000 factory and local field representatives to serve you

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1.888.373.6767




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more sensors, more solutions

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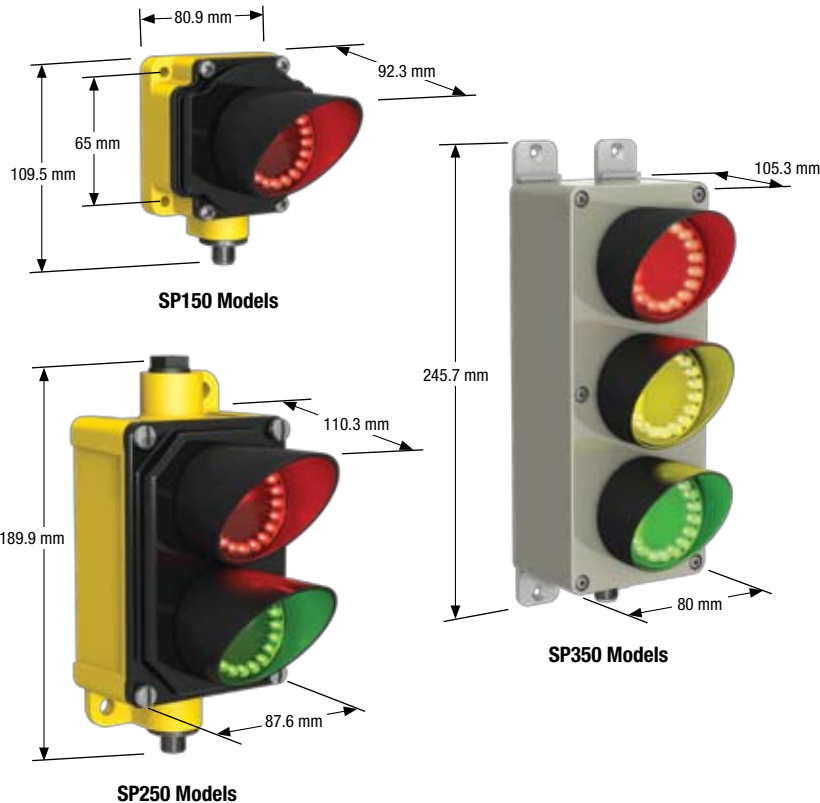
EZ-LIGHT™ Traffic Lights

Models*	Indicators	LED Function**	Input	Supply Voltage	Construction	Connection
	SP150GPQ	1	PNP/NPN Selectable	15 to 30V dc	Flat or DIN-Mount Polycarbonate	4-Pin Euro QD
	SP150RPQ					
	SP150GA120		85 to 130V ac	85 to 130V ac		Field-Wired
	SP150RA120					
	SP150GRYPQ		PNP	15 to 30V dc		4-Pin Euro QD
	SP150GRYNQ		NPN			
	SP250GRPQ	2	PNP	15 to 30V dc	Flat Mount Polycarbonate	4-Pin Euro QD
	SP250GRNQ		NPN			
	SP250GRA120		85 to 130V ac	85 to 130V ac		Field-Wired
	SP350GYRPQ	3	PNP	15 to 30V dc	Flat Mount Polycarbonate	4-Pin Euro QD
	SP350GYRNQ		NPN			
	SP350GYRA120		85 to 130V ac	85 to 130V ac		Field-Wired


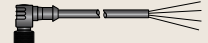
* A model with a QD requires a mating cordset. For DC models, standard 4-pin Euro integral QD models are listed. For field-wired models, omit suffix **Q** from model number (example, **SP150GP**). AC models are field-wired only.

** Contact factory at 1-888-373-6767 for other colors and color combinations.



Dimensions



Quick-Disconnect (QD) Cordsets

Description	Models	Length
	MQDC-406	2 m
	MQDC-415	5 m
	MQDC-430	9 m
	MQDC-406RA	2 m
	MQDC-415RA	5 m
	MQDC-430RA	9 m

Mounting Accessories

Elevated Use— Standoff Pipe and Adaptors	Bracket
 <ul style="list-style-type: none"> SOP-E12-150A (150 mm) SOP-E12-300A (300 mm) SOP-E12-900A (900 mm) aluminum pipe SOP-E12-150SS (150 mm) SOP-E12-300SS (300 mm) SOP-E12-900SS (900 mm) stainless steel pipe SA-E12M30 Thermoplastic Acetal mounting base 	 <p>SMBDX80DIN Black reinforced thermoplastic polyester DIN-mount bracket for use with SP150 models</p>

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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

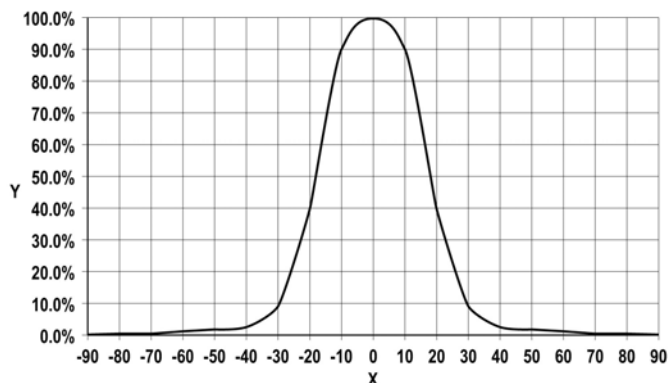
3-color models: 6 LEDs per color

Contact factory for other colors and color combinations.

Specifications

Feature	Description	
Supply Voltage and Current	DC models: 15 to 30V dc 1-Color: @ 120 mA max. per LED color 3-Color: @ 40 mA max. per LED color	AC models: 85 to 130V ac or 75 to 120V dc @ 16 mA per LED color
Indicators	LED colors are independently selected, depending on model	
Input Response Time	Indicator ON/OFF: 10 ms (max.)	
Environmental Rating (See note 1)	Fully encapsulated; Electronics : IEC IP67 Enclosure : • SP150: IEC IP67 • SP250: IEC IP65 • SP350: IEC IP65	
Connections	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).	
Operating Conditions	-40° to +50° C (-40° to +122° F)	
Application Notes	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)

NPN Hookups - QD Models

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

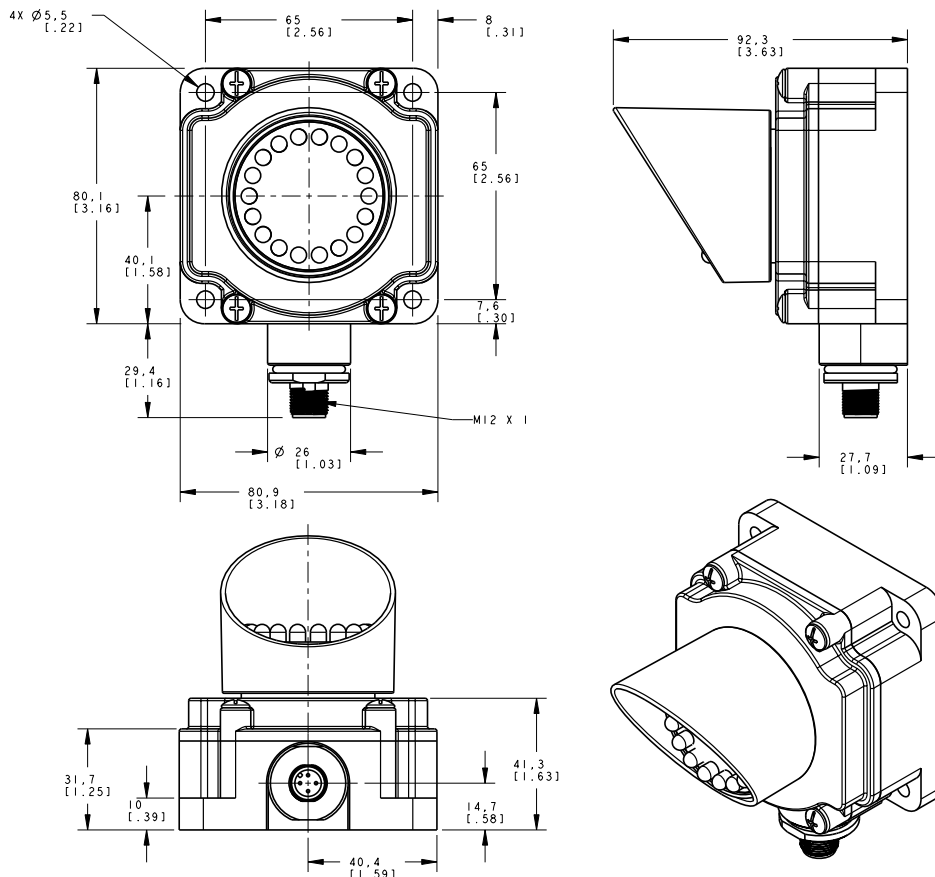
NPN Hookups - Field-Wired Models

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

AC Hookups

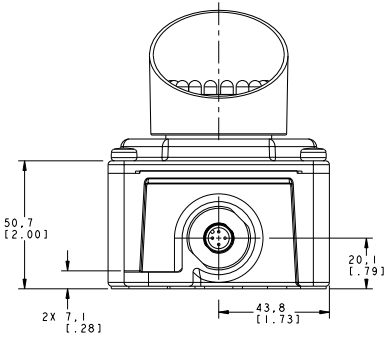
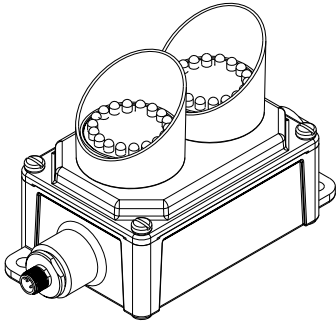
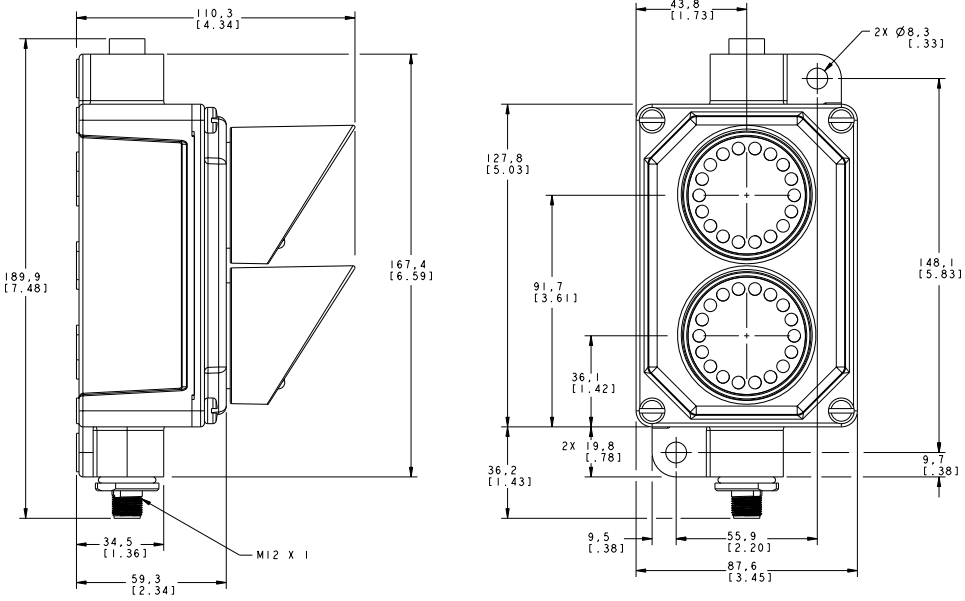
SP150XA120 (1-Color Models)	SP350XXXA120 (3-Color Models)
SP250XXA120 (2-Color Models)	Wiring Key:
	<p>2 = White</p> <p>4 = Black</p> <p>C1 = Color 1</p> <p>C2 = Color 2</p> <p>C3 = Color 3</p> <p>N = Neutral</p>

Dimensions - SP150...Models*



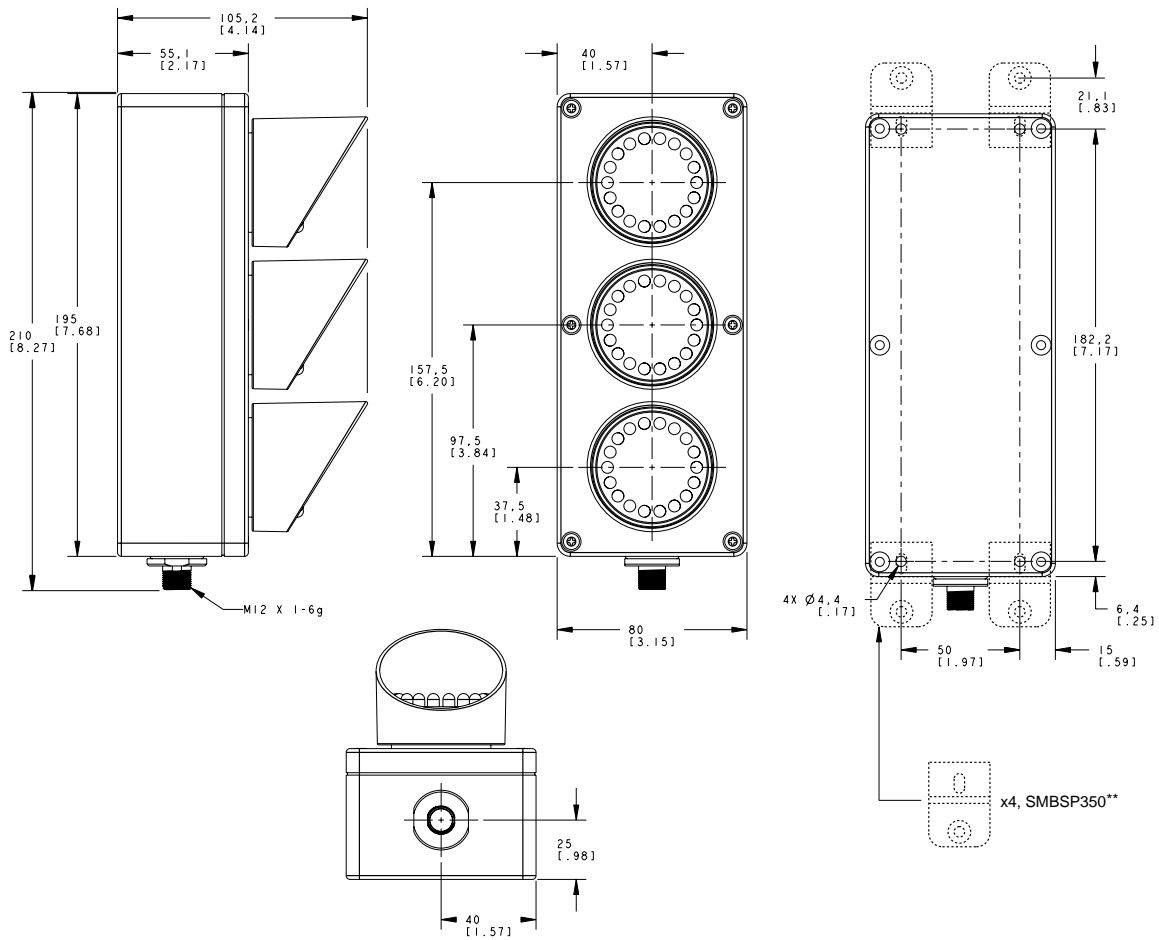
* Field-wired models have ½" NPT port in place of M12 connector

Dimensions - SP250...Models*



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

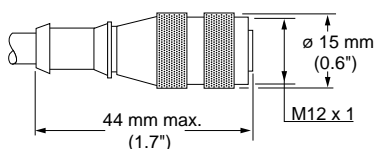
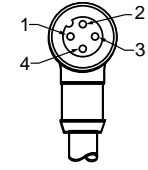
Dimensions - SP350...Models*

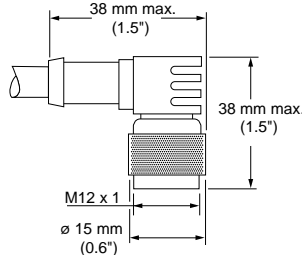


* Field-wired models have access hole for ½" conduit fitting in place of M12 connector





** 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	MQDC-406	2 m (6.5')		
	MQDC-415	5 m (15')		
	MQDC-430	9 m (30')		

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

Mounting Brackets

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



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.