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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more sensors, more solutions

EZ-LIGHT™ Traffic Lights

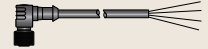|	Models*	Indicators	LED Function**	Input	Supply Voltage	Construction	Connection
	SP150GPQ	1	1 Color: Green (18 LEDs)	PNP/NPN Selectable	15 to 30V dc	Flat or DIN-Mount Polycarbonate	4-Pin Euro QD
	SP150RPQ		1 Color: Red (18 LEDs)				
	SP150GA120		1 Color: Green (18 LEDs)	85 to 130V ac	85 to 130V ac		Field-Wired
	SP150RA120		1 Color: Red (18 LEDs)				
	SP150GRYPQ		3 Color: Green, Red, Yellow (6 LEDs per color)	PNP	15 to 30V dc		4-Pin Euro QD
	SP150GRYNQ			NPN			
	SP250GRPQ	2	Top Indicator: Red (18 LEDs) Bottom Indicator: Green (18 LEDs)	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	Top Indicator: Red (18 LEDs) Middle Indicator: Yellow (18 LEDs) Bottom Indicator: Green (18 LEDs)	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.

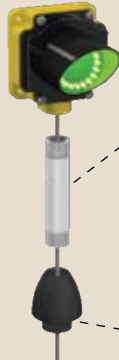** Contact factory at 1-888-373-6767 for other colors and color combinations.

Dimensions

SP150 Models
80.9 mm
92.3 mm
109.5 mm
65 mm

SP250 Models
189.9 mm
110.3 mm
87.6 mm

SP350 Models
245.7 mm
105.3 mm
80 mm
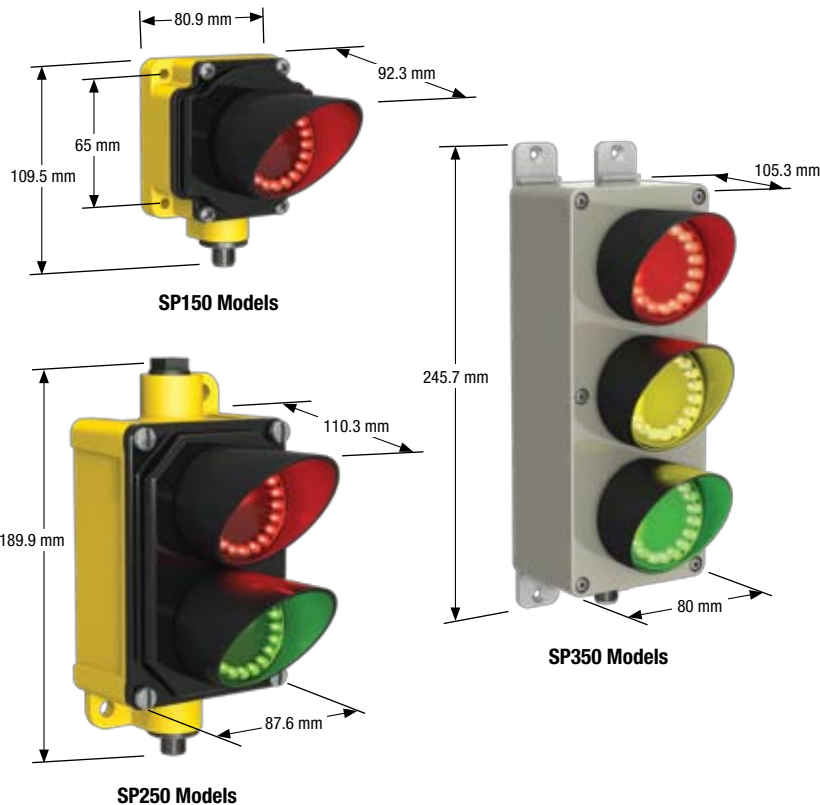
Quick-Disconnect (QD) Cordsets

Description		Models	Length
	4-pin M12/Euro-style, straight	MQDC-406	2 m
		MQDC-415	5 m
		MQDC-430	9 m
	4-pin M12/Euro-style, right-angle	MQDC-406RA	2 m
		MQDC-415RA	5 m
		MQDC-430RA	9 m

Mounting Accessories

Elevated Use— Standoff Pipe and Adaptors	Bracket
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	**SMBDX80DIN** Black reinforced thermoplastic polyester DIN-mount bracket for use with SP150 models

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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		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
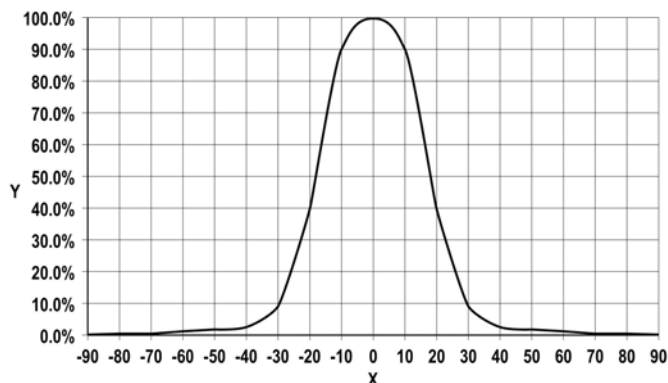
X: Viewing Angle (Deg)

Y: Intensity (Percent)

PNP Hookups - QD Models

SP150XPQ (1-Color Models)	SP150XXXPQ and SP350XXXPQ (3-Color Models)

SP250XXPQ (2-Color Models)	Wiring Key:
	1 = Brown ⊗ indicates Not Used 2 = White C1 = Color 1 3 = Blue C2 = Color 2 4 = Black C3 = Color 3

PNP Hookups - Field-Wired Models

SP150XP (1-Color Models)	SP150XXXP (3-Color Models)	Wiring Key:
		1 = Brown 2 = White 3 = Blue 4 = Black C1 = Color 1 C2 = Color 2 C3 = Color 3
SP250XXP (2-Color Models)	**SP350XXXP (3-Color Models)**	

NPN Hookups - QD Models

SP150XPQ (1-Color Models)*	SP150XXXNQ and SP350XXXNQ (3-Color Models)
*NPN functionality using 1-Color PNP model	

SP250XXNQ (2-Color Models)	Wiring Key:	
	1 = Brown 2 = White 3 = Blue 4 = Black	⊗ indicates Not Used C1 = Color 1 C2 = Color 2 C3 = Color 3

NPN Hookups - Field-Wired Models

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

AC Hookups

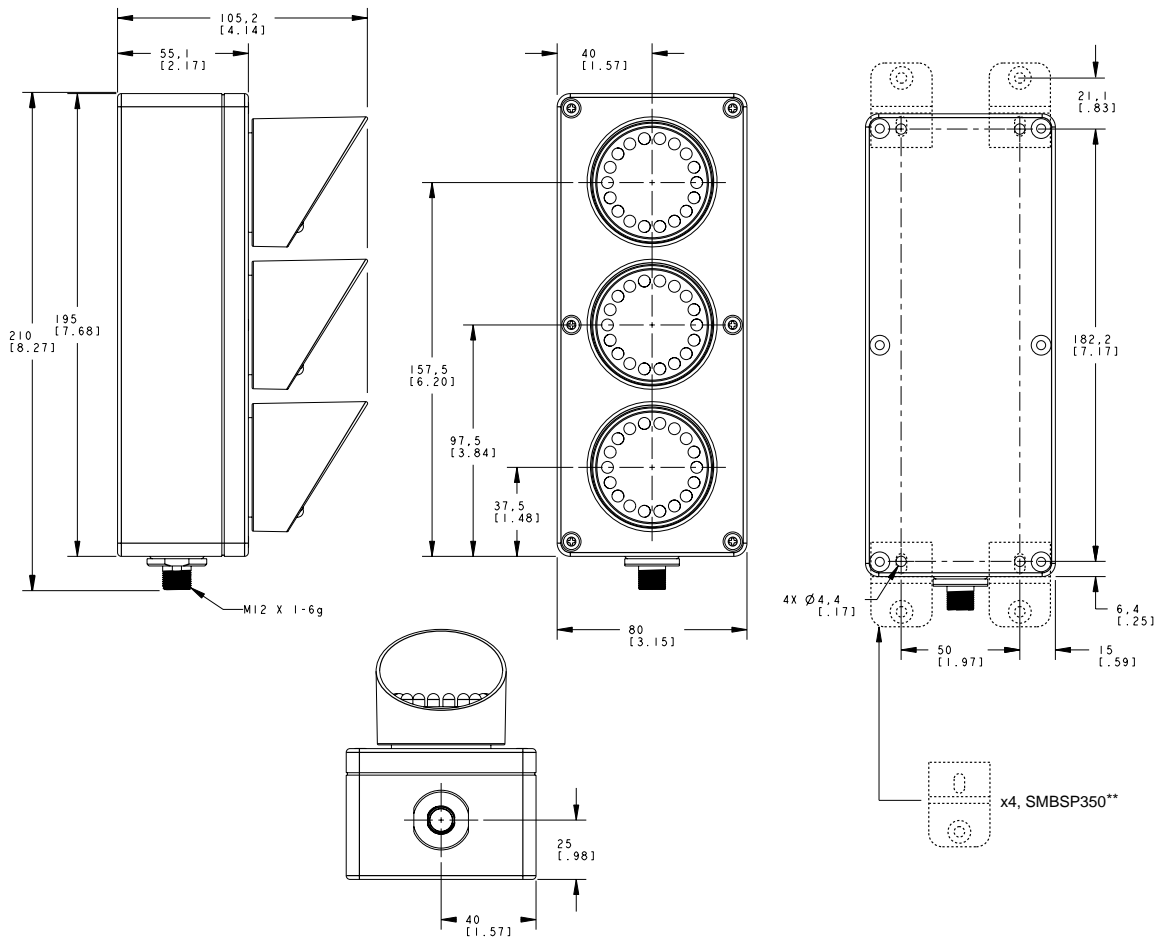| SP150XA120 (1-Color Models)	SP350XXXA120 (3-Color Models)
SP250XXA120 (2-Color Models)	**Wiring Key:**
	2 = White C1 = Color 1 4 = Black C2 = Color 2 C3 = Color 3 N = Neutral

Dimensions - SP150...Models*
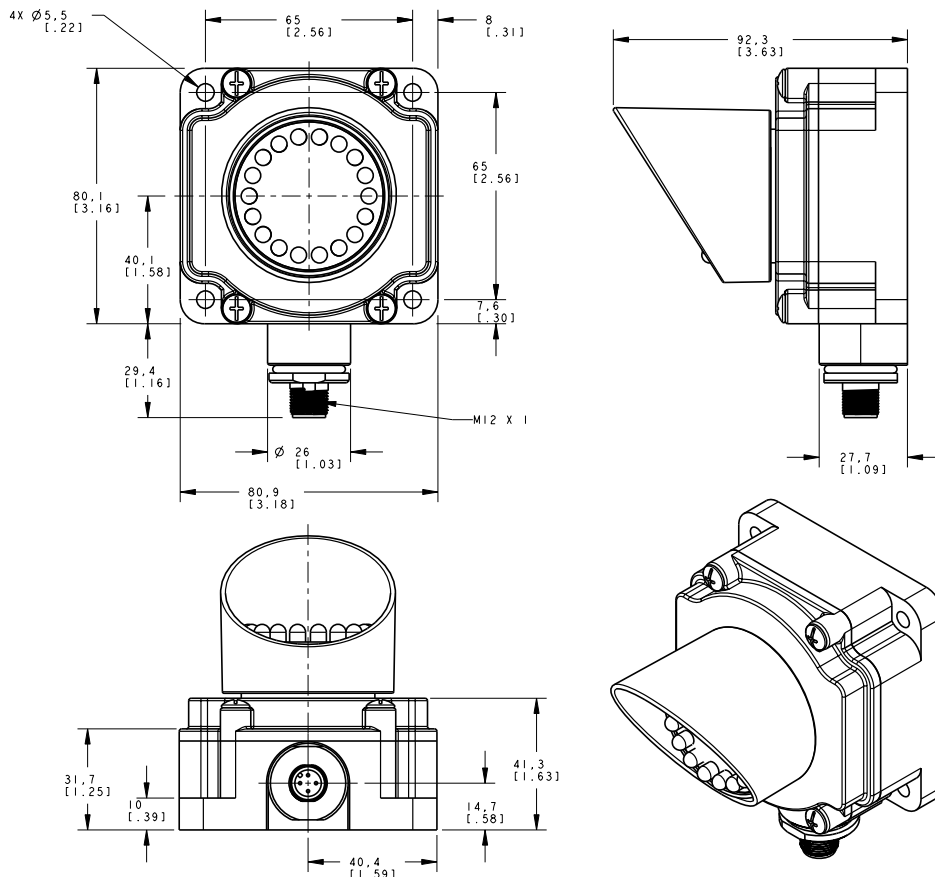
* Field-wired models have ½" NPT port in place of M12 connector

Dimensions - SP250...Models*
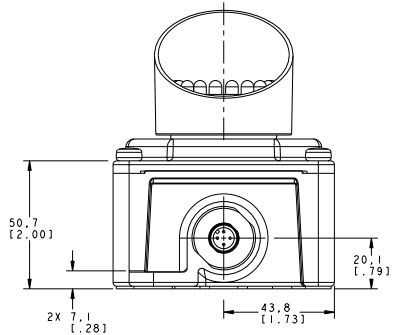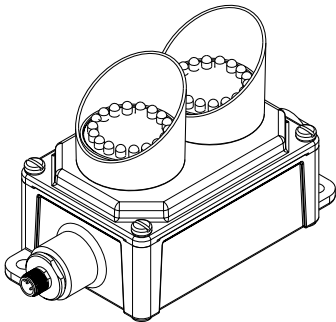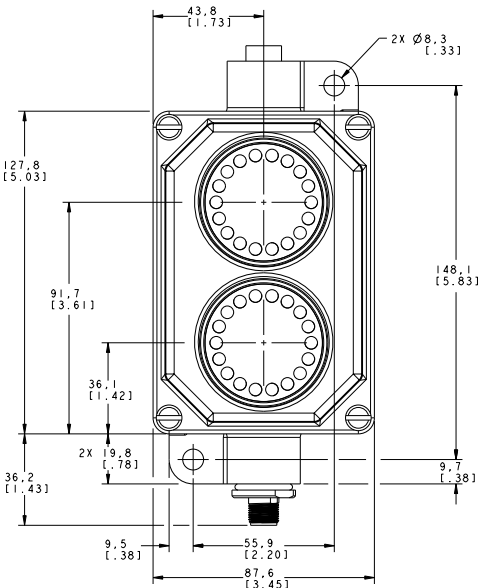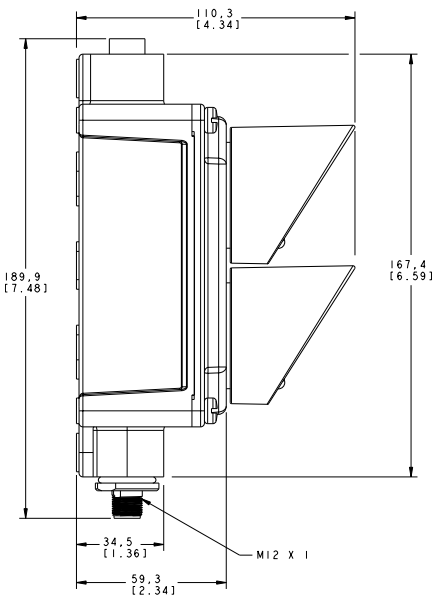
* Field-wired models have ½" NPT port in place of M12 connector

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

4-Pin Euro-Style Cables – Single-Ended				
Style	**Model**	**Length**	**Dimensions**	**Pinout**
4-pin Euro-style Right-angle	**MQDC-406RA** **MQDC-415RA** **MQDC-430RA**	2 m (6.5') 5 m (15') 9 m (30')	38 mm max. (1.5") / 38 mm max. (1.5") / M12 x 1 / ø 15 mm (0.6")	1 = Brown 2 = White 3 = Blue 4 = Black

Mounting Brackets

Model		Features	Mounting System	
Stainless Steel	**Aluminum**	• 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		• 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.

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