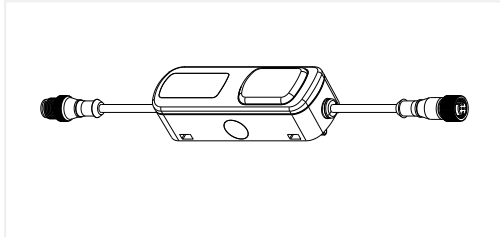


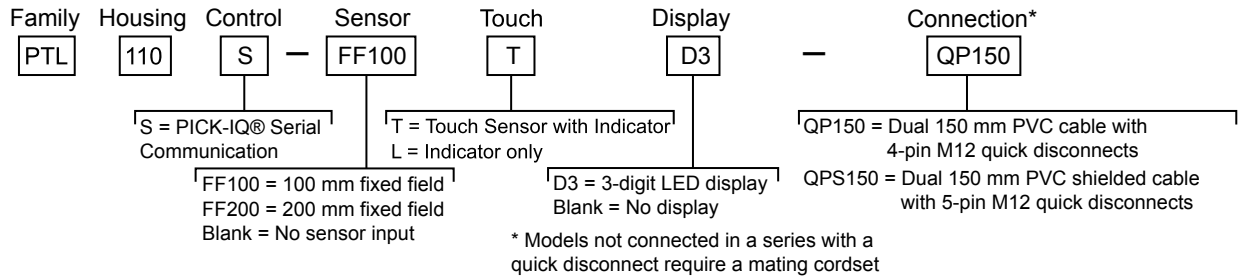
## Datasheet

This datasheet contains limited information on the PTL110S Pick-to-Light device. For complete information on configuration, performance, troubleshooting, dimensions, and accessories, please refer to the Pick-to-Light System Instruction Manual. Go to [www.bannerengineering.com](http://www.bannerengineering.com) and search 206185 to view the Instruction Manual or 209995 to view the Device Register Map. Use of this document assumes familiarity with pertinent industry standards and practices.



- Customizable pick-to-light logic with up to 14 colors in one device
- Translucent face appears gray when off to avoid false indication
- M12 connector models for plug-and-play indication
- Wide 180° field of view
- 3-digit, 14-segment LED display
- Photoelectric and touch-sensing options
- RS-485 Modbus communication featuring PICK-IQ® technology for faster response speed

## Models



## PTL110S Wiring

Wiring for the QP Models				
4-pin M12 Male	4-pin M12 Female	Pin	Wire Color	Connection
		1	brown	10 V DC to 30 V DC
		3	blue	DC common
		4	black	RS-485 (-)
		2	white	RS-485 (+)

Wiring for the QPS Models				
5-pin M12 Male	5-pin M12 Female	Pin	Wire Color	Connection
		1	brown	10 V DC to 30 V DC
		3	blue	DC common
		4	black	RS-485 (-)
		2	white	RS-485 (+)
		5	gray	Shield

## Specifications

### Supply and Voltage Current

10 V DC to 30 V DC, UL Listed class 2 power supply  
1.35 Watts maximum power draw

### Maximum Current

135 mA at 10 V DC  
50 mA at 24 V DC  
45 mA at 30 V DC




Current measurements assume indicator is on at high intensity, display is on, and sensor module is active. Typical device current will be dependent on its configuration. See the Instruction Manual for more information.

**Construction**

Housing: ABS  
 Indicator: Polycarbonate  
 Lens: Acrylic

Operating Conditions—40 °C to +50 °C (–40 °F to +122 °F) 90% at +50 °C maximum relative humidity (non-condensing)

**Certifications**

 Banner Engineering BV  
 Park Lane, Culliganlaan 2F bus 3  
 1831 Diegem, BELGIUM

 Turck Banner LTD Blenheim House  
 Blenheim Court  
 Wickford, Essex SS11 8YT  
 GREAT BRITAIN

 cUL US LISTED

**Optical Sensor Emitter LED**

Infrared 870 nm


**Connections**

Integral PVC cable with a quick-disconnect connector, length varies depending on model

**Environmental Rating**

IP54

**Required Overcurrent Protection**

 **WARNING:** Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to [www.bannerengineering.com](http://www.bannerengineering.com).

Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	1.0	30	0.5

**FCC Part 15 Class B**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

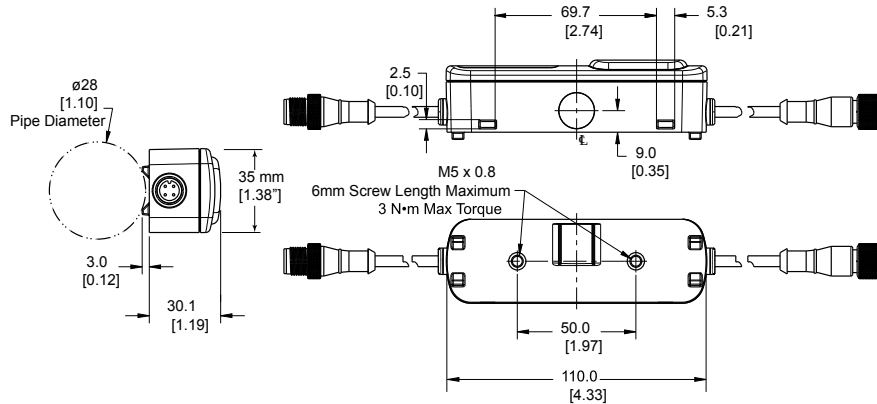
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**Industry Canada**

This device complies with CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(B). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

## Dimensions



## Banner Engineering Corp Limited Warranty

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For patent information, see [www.bannerengineering.com/patents](http://www.bannerengineering.com/patents).

Document title: PTL110S Pick-to-Light

Part number: 206183

Revision: D

Original Instructions

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