

 **PresencePLUS[®] Pro**

NEW! Vision Sensor Sealed for Challenging Industrial Environments.



Delivering all the functionality and features of the *PresencePLUS Pro* into harsh environments.

Durable, rugged construction. The *Pro* now features a compact, metal, IP68-rated camera and integrated light for machine vision inspections in dirty or washdown conditions.

The most features to robustly solve an application.

- Operates with intuitive *PresencePLUS* software with Remote TEACH for rapid configuration
- Includes all the *PresencePLUS PROII* tools: Locate, Pattern Find and Count, Geometric Find and Count, Edge, Object, Blob, Average Gray Scale, Measure, Color and optional Bar Code Reader

Solve most applications in your plant.

The sealed *PresencePLUS Pro* solves thousands of applications:

- 360° geometric fixture-free inspection
- Error proofing
- Assembly verification
- Fast pattern presence/absence recognition
- Flaw detection
- Orientation confirmation
- Sealed cap and flap verification
- Fill level detection
- 2D and 1D bar code reading
- Color verification and matching

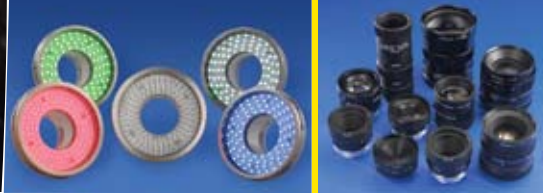
Simple user interface.

- ▶ Proven user interface common to all Banner *PresencePLUS* sensors
- ▶ Intuitive, three-step, point-and-click operation
- ▶ Built-in Inspection Wizard
- ▶ Quick TEACH using a single image for reference
- ▶ Multiple stored inspections



Easiest sensor to set up and operate.

- ▶ Compact camera with separate DIN-mountable controller
- ▶ 10/100 Ethernet and serial communications
- ▶ Direct connectivity to EtherNet/IP and Modbus TCP industrial networks
- ▶ ActiveX utilities for exporting inspections, images and results
- ▶ Six discrete I/O configurable as NPN or PNP, and for timing and function
- ▶ Convenient 20-pin removeable terminal block
- ▶ 10 to 30V dc operation



Choice of lighting and lenses.

- ▶ Features IP68 integrated lights with bright, strobed or continuous LED illumination in infrared, red, blue, green or white for optimal contrast
- ▶ Offers wide choice of standard C-mount lenses for desired field of view at extended distances

Local applications support—worldwide.

- ▶ More than 3,000 local specialists plus factory applications engineers help you solve your applications quickly and effectively.



- ▶ iKnow[®] Vision interactive online training is always available.

www.bannerengineering.com/sealedpro

1.866.816.5178

BANNER[®]




more sensors, more solutions

bannerengineering.com







PresencePLUS® Pro Sealed Vision Sensors







Pro Controllers with PROII Tool Set

Model Number	Vision Tools	
	PPROCTL	PROII Gray Scale
	PPROCTLBCR	PROII Gray Scale & Bar Code
	PPROCTLC	PROII Gray Scale & Color Tool







Sealed Pro Cables & Cordsets

Model Number	Description	Length
	PPC13S	Camera to Controller
	PPC23S	Camera to Controller
	PKG3M-4	Sealed Ring Light
	PKG3M-7	Sealed Ring Light



Sealed Pro Cameras

	Model Numbers		Description	
	Gray Scale	Color	Ring Light	Window
	PPROCAMSC-G	PPROCAMCSC-G	Cover (no light)	Glass
	PPROCAMSC-P	PPROCAMCSC-P		Plastic
	PPROCAMSR-G	PPROCAMCSR-G	Red	Glass
	PPROCAMSR-P	PPROCAMCSR-P		Plastic
	PPROCAMSI-G	PPROCAMCSI-G	Infrared	Glass
	PPROCAMSI-P	PPROCAMCSI-P		Plastic
	PPROCAMSB-G	PPROCAMCSB-G	Blue	Glass
	PPROCAMSB-P	PPROCAMCSB-P		Plastic
	PPROCAMSG-G	PPROCAMCSG-G	Green	Glass
	PPROCAMSG-P	PPROCAMCSG-P		Plastic
	PPROCAMSW-G	PPROCAMCSW-G	White	Glass
	PPROCAMSW-P	PPROCAMCSW-P		Plastic

Standard PROII Gray Scale Vision Tools

-  **Gray Scale.** Determines the average gray scale value of an area
-  **Blob.** Determines the presence, connectivity and location of selected features
-  **Edge.** Determines the presence, number, classification and location of edges
-  **Object.** Determines the presence, number, classification, size and location of objects
-  **Pattern Count.** Determines the presence, number and location of a pattern(s)
-  **GEO Count.** Locates 360° inspection detail regardless of product orientation

Optional PROII Vision Tools

-  **Bar Code.** Finds and decodes advanced 2D and 1D linear bar codes
-  **Color.** Inspects unlimited color variation within the camera's FOV



www.bannerengineering.com/prosealed

iKnow™ Online Training & Tutorials



A complete resource for tutorials, product questions and answers—and the mechanics and theory behind sensor technology available online at www.bannerengineering.com/training

- Q. Do vision sensors have an IP rating?**
- Q. What do the numerals following the "IP" stand for?**
- Q. How long will my IP68 sensor function while under water?**
- Q. Is my IP68 sensor protected from corrosion?**
- Q. Do IP ratings take temperature into account?**

Go online for answers to these questions or to pose your own!



Q&A: IP Ratings

Sealed Pro Basic Kit Model Key

Basic kits include a controller, sealed camera with cover or ring light, camera-to-controller cordset, ring light cable, CD-ROM and Quickstart Guide.

Controller & Sealed Camera



- Blank** = PPROCTL controller & PPROCAMS camera (640 x 480)
- B** = PPROCTLBCR controller & PPROCAMS camera (640 x 480)
- C** = PPROCTLC controller & PPROCAMCS camera (752 x 480)

Ring Light



- C** = Cover (no light)
- G** = Green
- R** = Red
- I** = Infrared
- B** = Blue
- W** = White

Window



- G** = Glass
- P** = Plastic

Cordset/Cable Length



- 13** = 4 m
- 23** = 7 m

PresencePLUS®: A complete offering of vision sensing products

Pro

Full-function vision sensor in compact two-piece housing

P4 OMNI & OMNI 1.3

Full-function vision sensor in economical one-piece housing

P4 AREA & AREA 1.3

Object and gray-scale sensing of selected areas

P4 GEO & GEO 1.3

360° fixture-free inspection

P4 EDGE & EDGE 1.3

High-speed edge sensing and measurement

P4 BCR & BCR 1.3

Fully integrated 2D and 1D bar code reader

Lights, Lenses & Accessories

Full selection of lights, lenses, monitors, enclosures and more

