



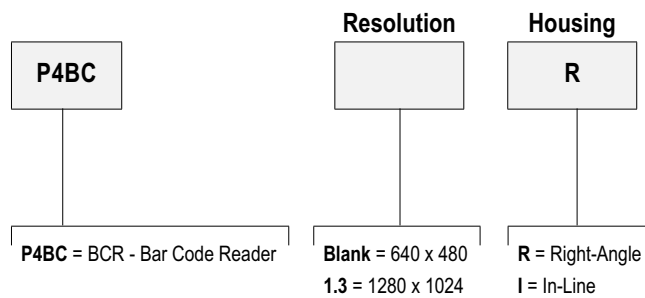
# P4 BCR

## Bar Code Reader

P4 Bar Code Readers find and decode 2D and 1D linear bar codes.

- Industry-standard bar code metrics and grading
- Economical one-piece solution
- Available in high-resolution models
- High performance vision inspections in self-contained in-line or right-angle housing styles that fit in the palm of your hand
- Provides direct connectivity to EtherNet/IP and Modbus/TCP industrial networks
- For vision lighting products with UV: (Ring lights, area lights, linear array lights available with UV LEDs)

### Choosing a P4 BCR Example Model Number P4BCR



For more specifications see page 399.

\* To add the OCR/OCV premium tool add suffix **-OC** to the model number. (example **P4BCR-OC**)

### Conducts high-performance reading of industry standard barcodes.

#### 2D Bar Codes

Data Matrix (ECC200)  
QR & Micro QR







#### 1D Bar Codes

Code 128	EAN-13 (UPC-A)	Postnet
Code 39	EAN-8	Pharmacode
Codabar	UPC-E	
Interleaved 2 of 5	IMB	

### Cordsets





#### Power

See page 918

12-Pin QD	
Length	Straight
1.83 m	 P4C06
7.01 m	 P4C23
9.75 m	 P4C32
15.2 m	 P4C50
22.9 m	 P4C75
34.0 m	 P4C110





#### Video


See page 923

BNC to BNC	
Length	Straight
1.83 m	 BNC06
5.57 m	 BNC15
9.14 m	 BNC30
14.6 m	 BNC48

#### Ethernet Communication

See page 924

RJ45 to RJ45		
Length	Shielded	Shielded Crossover
2.13 m	 STP07	STPX07
7.62 m	 STP25	STPX25
15.2 m	 STP50	STPX50
22.9 m	 STP75	STPX75

 Additional cordset information available. See page 902.




Right-Angle Sensor Models  
(shown with lens—sold separately)



In-line Sensor Models  
(shown with lens—sold separately)

## PresencePLUS® P4 Dedicated-Function Specifications

<b>Supply Voltage and Current</b>	10 to 30 V dc (24 V dc $\pm$ 10% if the sensor powers a light source) <b>P4BCR:</b> Less than 650 mA (exclusive of lights and I/O load) <b>P4BCR 1.3:</b> Less than 550 mA (exclusive of lights and I/O load)	
<b>Memory</b>	<b>Storage:</b> BCR—8 MB BCR 1.3—32 MB	<b>Inspection (jobs):</b> 999 max. <b>Inspection (jobs):</b> 999 max.
<b>Input/Output Configuration</b>	NPN (sinking) or PNP (sourcing) software selectable	
<b>Output Rating</b>	150 mA max. each output <b>OFF-state leakage current:</b> less than 100 $\mu$ A <b>ON-state saturation voltage:</b> NPN—less than 1 V @ 150 mA max. PNP—greater than V+ -2 V	
<b>Bicolor Status Indicators</b>	<b>PASS/FAIL:</b> Green ON steady—PASS <b>POWER/ERROR:</b> Green ON steady—POWER <b>READY/TRIGGER:</b> Green ON steady—READY	Red ON steady—FAIL Red ON steady—ERROR Yellow ON steady—TRIGGER
<b>Display Options</b>	PC or NTSC video (uses 9 m max. BNC cordset)	
<b>Discrete I/O</b>	1 Trigger IN 1 Strobe OUT 4 Programmable I/O 1 Product Change IN 1 Remote TEACH IN	
<b>Communications</b>	RJ-45 10/100 Ethernet connection for running PresencePLUS P4 software and/or output inspection results RS-232 connection for output of inspection results	
<b>Imager Resolution</b>	<b>BCR:</b> 640 x 480 pixels <b>BCR 1.3:</b> 1280 x 1024 pixels	
<b>Pixel Size</b>	<b>BCR:</b> 7.4 x 7.4 $\mu$ m <b>BCR 1.3:</b> 6.7 x 6.7 $\mu$ m	
<b>Imager Size</b>	<b>BCR:</b> 4.8 x 3.6 mm, 6 mm diagonal (1/3 inch CCD) <b>BCR 1.3:</b> 8.6 x 6.9 mm, 11 mm diagonal (2/3 inch CMOS)	
<b>Levels of Gray</b>	256 Gray Scale	
<b>Exposure Time</b>	<b>BCR:</b> 0.1 to 2830 milliseconds <b>BCR 1.3:</b> 0.1 to 1670 milliseconds	
<b>Full Image Acquisition</b>	<b>BCR:</b> 48 frames per second max.* <b>BCR 1.3:</b> 27 frames per second max.*	
<b>Lens Mount</b>	Standard C-mount (1 inch—32 UN)	
<b>Construction</b>	Black anodized aluminum housing, glass lens	
<b>Weight</b>	<b>In-line:</b> 293 g <b>Right-angle:</b> 385 g	
<b>Environmental Rating</b>	IEC IP20; NEMA 1	
<b>Operating Temperature</b>	<b>Stable ambient temperature:</b> 0° to +50° C <b>Stable ambient lighting:</b> No large, quick changes in light level; no direct or reflected sunlight <b>Relative humidity:</b> 90% (non-condensing)	
<b>Certifications</b>		

\* A reduced Field-of-View (FOV) dramatically increases acquisition rates.