

# **Checker 4G7C**

## COLOR | VISION SENSOR

- Unmatched ease of use in color presence/ absence applications
- > Set up using the industry proven, easy-to-use and powerful Checker application software
- Flexible optics
- Exceptionally compact design

Verifying the correct product color is now easier than ever! The Checker 4G7C introduces the unmatched ease of set up and use that the Checker products are known for but now for color applications. Simply click on the color to be verified with the application software and you can be up and running in seconds!

The Checker 4G7C also includes all the great other features that the 4G7 Series is known for including the ability to add virtually unlimited sensor tools to a single job. In addition, the Checker software makes it easy to use the logic tools to provide intelligent outputs to determine whether a particular part passed or failed.

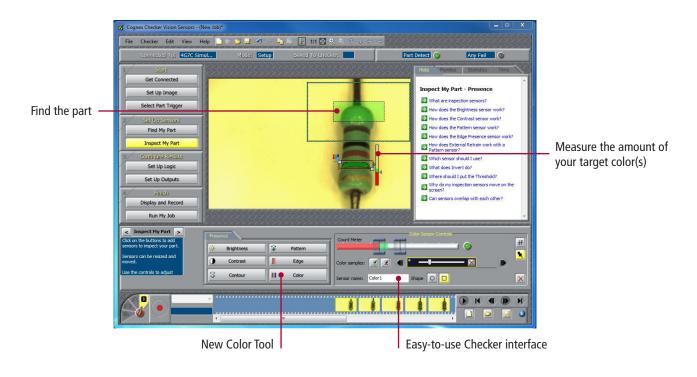
### **Model Highlights**

- Checker 4G7C delivers 376 x 240 pixel resolution
- Ethernet support for industrial protocols
- High-intensity white LED illumination for detecting and inspecting small parts and part features at up to 800 parts per minute



# The Checker internal trigger part finding sensor has four important advantages:

- 1. Does not require additional sensors to determine if a part is present.
- 2. No fixturing required; Checker can locate a part in varying positions in the inspection area.
- 3. Detects a part by locating a feature on the part, not just an edge.
- 4. Supports delayed output, based on time or encoder measurement.







### **4G7C Specifications**

TO/C Specif	icacionis					
SENSOR						
Resolution	376 x 240					
LIGHTING & FILTER OPTIONS						
4G7C	Integrated bright white LEDs					
EXTERNAL TRIGGER OUTPUT						
Input ON	> 10VDC (> 6mA)					
Input OFF	< 2VDC (< 1.5mA)					
Protection	Opto-isolated, polarity-independent					
OUTPUTS						
Output	Solid state switch					
Rating	100mA, 24VDC					
Max voltage drop	3.5VDC @ 100mA					
Max load	100mA					
Protection	Opto-isolated, protected from short circuit, overcurrent, and reverse polarity					
<b>ENCODER INPUTS</b>						
Differential	A+/B+: 5-24V (50 kHz max) A-/B-: Inverted (A+/B+)					
Single Ended	A+/B+: 5-24V (50 kHz max) A-/B-: VDC = ½ (A+/B+)					
JOB CONTROL INPUTS						
Jobs supported	32					
Input ON	> 10VDC (> 6mA)					
Input OFF	< 2VDC (< 1.5mA)					
Protection	Opto-isolated, polarity-independent					
POWER						
Voltage	+24VDC (22-26VDC)					
Current	250mA max					
ENVIRONMENTAL						
Operating Temperature	0° to 50°C (32° to 122°F)					
Storage temperature	-30° to 80°C (-22° to 176°F)					
Operating humidity	0%-90%, non-condensing					
Operating altitude	4000m maximum					
Shock	80Gs for 5ms on each axis (per IEC 68-2-27)					
Vibration	10Gs (10-500Hz) per IEC 68-2-6					
Protection	IP67					

PLC COMMUNICATION					
EIP w/AOP, PROFINET, TCP/IP, UDP/IP					
FTP Image					
MECHANICAL					
Dimensions	2.64in (67mm) H x 1.61in (41mm) W x 2.72in (69mm) D				
Weight	148g (4.2oz)				
MODES OF OPERATION					
Internal part trigger, external part trigger, free running					
CERTIFICATIONS					
4G Series	CE, FCC, RoHS, KCC and BureauVeritas				
MINIMUM PC REQUIREMENTS					
(Only required for setup)					
Operating systems	XP <sup>™</sup> , Vista <sup>™</sup> , Microsoft <sup>®</sup> Windows 7 <sup>®</sup> 32&64 bit				
RAM	128 MB RAM				
Interface Ethernet	10/100 (4G Series)				
Screen resolution	1024 x 768 (96 DPI) or 1280 x 1024 (120 DPI) display				
CHECKER SENSORS					
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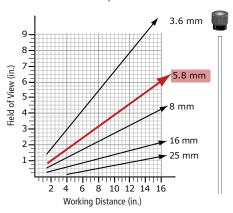
CHECKER SENSORS					
Model	Part Number				
4G7S	C4G7-24S-E00				
4G1	C4G1-24G-E00				
4G7	C4G7-24G-E00				
4G7C	C4G7C-24C-E00				
<b>Note:</b> The 5.8mm lens ships standard with Checker.					

OPTIONAL ACCESSORIES						
CKR-4G-CBL-001	Flying lead I/O cable (5m)					
CKR-200-CBL-RT-003	Right angle I/O cable (1m)					
CCB-84901-100X-XX	Ethernet Cable(s)					
CCB-84901-6001-05	Right angle Ethernet Cable (5m)					
C4G-BAK-000	Basic Accessory Kit					
CKR-200-LENSKIT	Lens Kit					

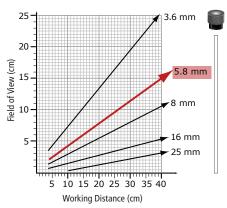
**Notes:** Basic Accessory Kit includes Quick Start Guide, Checker software CD and mounting screws. The Lens Kit includes 3.6, 8, 16 and 25mm lenses.

#### Field of View for Checker 4G7C Vision Sensors

Line plots show the field of view and working distance for standard and optional lenses in inches



Line plots show the field of view and working distance for standard and optional lenses in mm



### COGNEX

Companies around the world rely on Cognex vision and ID to optimize quality, drive down costs and control traceability.

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