

### **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.

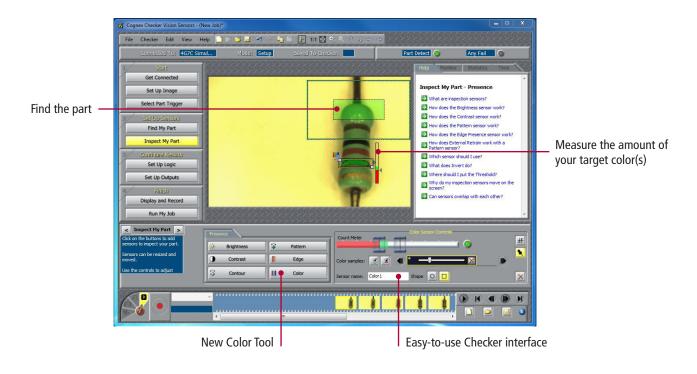
#### **Model Highlights**

- 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**

SENSOR					
Resolution	376 x 240				
LIGHTING & FILTER	ROPTIONS				
4G7C	Integrated bright white LEDs				
<b>EXTERNAL TRIGGE</b>	R 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 = $\frac{1}{2}$ (A+/B+)				
JOB CONTROL INP	UTS				
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 COMMUNICAT	TION				
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					
Model	Part Number				

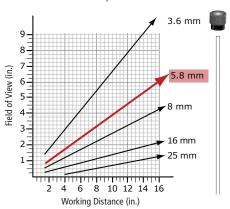
CHECKER SENSORS					
Model	Part Number				
IG7S	C4G7-24S-E00				
IG1	C4G1-24G-E00				
IG7	C4G7-24G-E00				
IG7C	C4G7C-24C-E00				
Note: The 5.8mm lens ships standard with Checker.					

# 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

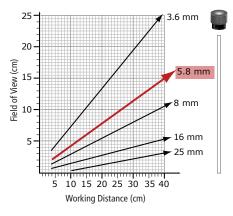
**Notes:** Basic Accessory Kit includes Quick Start Guide, Checker software CD and mounting screws. The Lens Kit includes 3.6, 8, 16 and 25mm lenses.

#### 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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