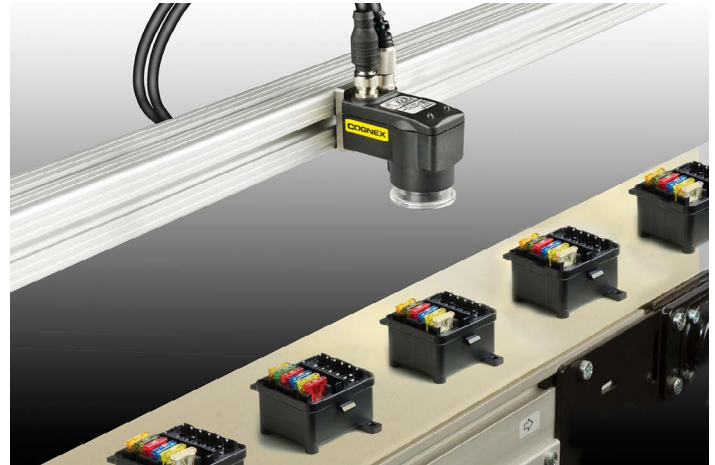


- Unmatched ease of use in color presence/absence applications
- Set up using the industry proven, easy-to-use and powerful Checker application software
- Flexible optics
- Exceptionally compact design



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 752 x 480 and 376 x 240 pixel resolution options
- 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
- Supports SensorView™ set-up and display

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.

Find the part

Measure the amount of your target color(s)

New Color Tool

Easy-to-use Checker interface

4G7C Specifications

SENSOR	
Resolution	752 x 480 376 x 240 (FOV selectable in software)

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

ENCODER INPUTS	
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 = 1/2 (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™, Vista™, Microsoft® Windows 7® 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
4G7S	C4G7-24S-E00
4G1	C4G1-24G-E00
4G7	C4G7-24G-E00
4G7C	C4G7C-24C-E00
4G7X	C4G7-24X-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.

SENSORVIEW 2

MECHANICAL	
Diagonal screen size	8.9in (225mm)
Dimensions	9.31 x 5.75 x 1.38in (236.6 x 146 x 35mm)
Weight	468g (16.51oz)

USER-SELECTED LANGUAGES	
English, German, Italian, French, Spanish, Portuguese, Japanese, Chinese (Simplified), Chinese (Traditional), Korean	

POWER	
Operating voltage	+24VDC (22-26VDC)
Power consumption	+5V @ 1.3A

ENVIRONMENTAL	
Operating temperature	0° to 50°C (32° to 122°F)
Operating humidity	0%-90%, non-condensing
Storage temperature	-10° – 60°C (-14° – 140°F)
Storage humidity	0%-90%, non-condensing
Shock	80G x 5ms (IEC 68-2-2)
Vibration	ENG61373 including IEC 60068-2-6, 60068-2-64 6.4, and 60068-2-27
Altitude	4000m
Protection	IP65

CERTIFICATIONS	
CE, c CSA us, FCC, RoHS, VCCI Vibration	

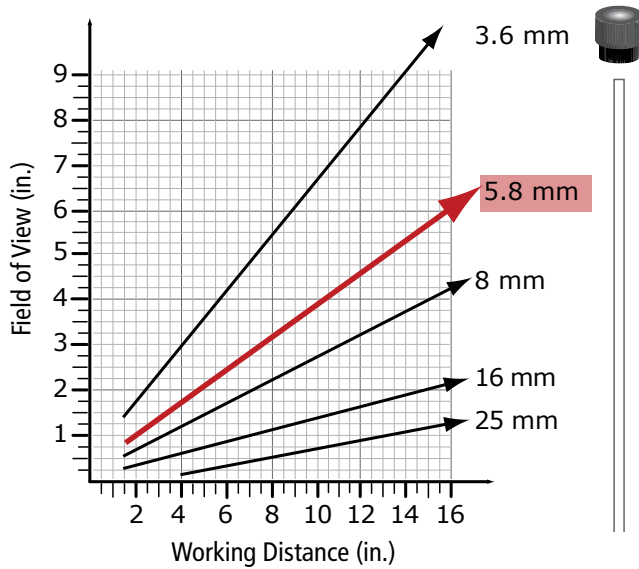
SENSORVIEW 2 PART NUMBERS	
Part Number	Description
SV-890-000	SensorView Smart Display
SV-CF-000	Compact Flash Card

Note: A complete SensorView 2 consists of these two part numbers.

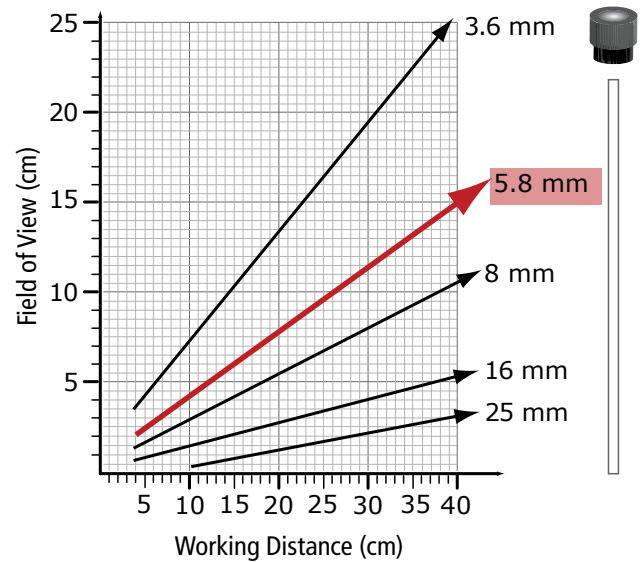
4G7C Specifications

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 cm



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

Corporate Headquarters One Vision Drive Natick, MA 01760 USA Tel: +1 508 650 3000 Fax: +1 508 650 3344

Americas

United States, East +1 508 650 3000
 United States, West +1 650 969 8412
 United States, South +1 615 844 6158
 United States, Detroit +1 248 668 5100
 United States, Chicago +1 630 649 6300
 Canada +1 905 634 2726
 Mexico +52 81 5030 7258
 Central America +52 81 5030 7258
 South America +1 909 247 0445
 Brazil +55 47 8804 0140

Europe

Austria +43 1 23060 3430
 Belgium +32 2 8080 692
 France +33 1 4777 1550
 Germany +49 721 6639 0
 Hungary +36 1 501 0650
 Ireland +353 1 825 4420
 Italy +39 02 6747 1200
 Netherlands +31 208 080 377
 Poland +48 71 776 0752
 Spain +34 93 445 67 78
 Sweden +46 21 14 55 88

Switzerland +41 71 313 06 05
 Turkey +90 212 306 3120
 United Kingdom +44 1327 856 040

Asia

China +86 21 5050 9922
 India +9120 4014 7840
 Japan +81 3 5977 5400
 Korea +82 2 539 9047
 Singapore +65 632 55 700
 Taiwan +886 3 578 0060

www.cognex.com