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.
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 = 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
Storage humidity 0%-90%, non-condensing
Shock 80Gs for 5ms on each axis (per IEC 68-2-27)
Vibration 10Gs (10-500Hz) per IEC 68-2-6
Protection IP67

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.

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

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.

Field of View (in.) vs. Working Distance (in.)

Field of View (cm) vs. Working Distance (cm)

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

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