

2900 Series Ultra Small Monochrome Machine Vision Camera

COHU

High performance video specifications

Small size, light weight

Extra rugged construction withstands high shock and vibration

Manual gain adjustment for precision imaging

Secure dipswitches discourage tampering

Easily integrates with other vision system components and software

Single Hirose connector for fast, tight connection

Quality, reliability, and responsiveness of Cohu Electronics

Competitively priced

High-Performance RS-170/CCIR 1/2" On-Chip Microlens Sensor



The 2900 Series CCD camera has been specially engineered for machine vision systems. Standard model is painted black, and custom colors are available.

The Cohu 2900 Series CCD camera is designed exclusively for machine vision applications and comes packed with the features most required by precision imaging and robotics manufacturers. It is exceptionally small and lightweight, and built to endure the mechanical vibration that is typically found in industrial imaging applications.

The Cohu 2900 is ideal for component alignment and placement, test and inspection, or sorting and gauging. It features an internal sync generator, and has external H&V or async reset capabilities, making it compatible to most standard frame grabbers.

Manual gain adjustment allows the camera to be set for optimal performance in relation to the application. Gamma is set at 1.0 to achieve a linear output that is best for components within the vision system, rather than a standard monitor. And the 2900 Series offers integration capability for low light level conditions.

In a package measuring only 1.13" H x 2.57" D x 1.73" W, you get 580 horizontal line resolution, microlens sensor technology for dramatic sensitivity and dynamic range.

Custom Designs and Packaging

Cohu Electronics is known worldwide for its ability to configure and manufacture cameras for unique and custom applications.

System Solutions

The 2900 Series is designed to be an efficient, off-the-shelf vision solution. For proprietary designs and packaging of machine vision cameras, ask your Cohu representative for information on customized product solutions.

Cohu has the resources to custom-design a system that includes video camera, optics, lighting, cables and harnesses, and frame grabbers or digitizers.

Using our in-house capability and experience can save you long engineering hours, eliminate coordination with multiple vendors, and assure you the exact package that you had in mind. You'll also find our pricing to be quite competitive when compared to doing it yourself.

The 2900 Series provides versatility and reliability in a high performance machine vision camera. From board-level design to its cast aluminum enclosure, you can also expect the highest value from the Cohu 2900 Series CCD camera.



Let Cohu help you solve your vision system requirements. Besides high performance cameras, we can integrate lighting, image capture devices, and custom mounting hardware.

Ask your Cohu representative for details.

2900 Series Monochrome CCD Cameras

SPECIFICATIONS

ELECTRICAL

Format

1/2" monochrome

Pixels

RS170: 768 H x 494 V
CCIR: 752 H x 582 V

Pixel cell size

RS170: 8.4 μm x 9.8 μm
CCIR: 6.6 μm x 8.30 μm

Synchronization

Internal sync generator, External H & V, async reset

Scanner

RS170: 2:1 interlace, 525 lines/ 60 fields/ 30 frames
CCIR: 2:1 interlace, 625 lines/ 50 fields/ 25 frames

Integration

2 or more fields externally controlled

Sensitivity

Full video: .65 lux/ .065 fc

Min. Illumination

0.05 lux

Gamma

1.0

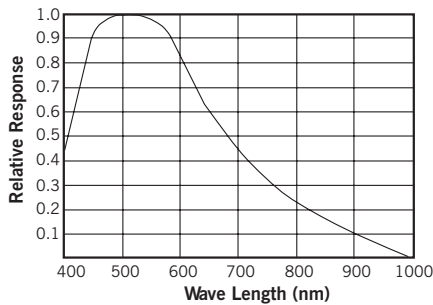
SNR

> 56dB

Power Input

12VDC, 2.7W

Spectral Response



Power Consumption

225mA

MECHANICAL

Dimensions

see illustration below

Weight

3.4 oz/ 95g (less lens)

Camera mount

2 each 1/4-20 & 8-32 female inline on optional mounting block

Lens mount

C mount, integral to case

Color

black standard; other colors quoted

Connectors

12 pin Hirose

ENVIRONMENTAL

Operating Temperature

4°F/ -16°C to 120°F/ 49°C

Shock (less lens)

30G, 11ms duration

Vibration (less lens)

8G (10Hz - 150Hz)

ORDERING INFORMATION

29X 2 - 2 0 0 0 /XXXX

Monochrome CCD machine vision camera, 1/2" sensor

Format

2 - 1/2" RS-170
5 - 1/2" CCIR

Power

2 - 12 VDC

Output Option

2 - Crystal, H&V, async reset

Optical Filter

0 - None

Unassigned

Options

0 - None

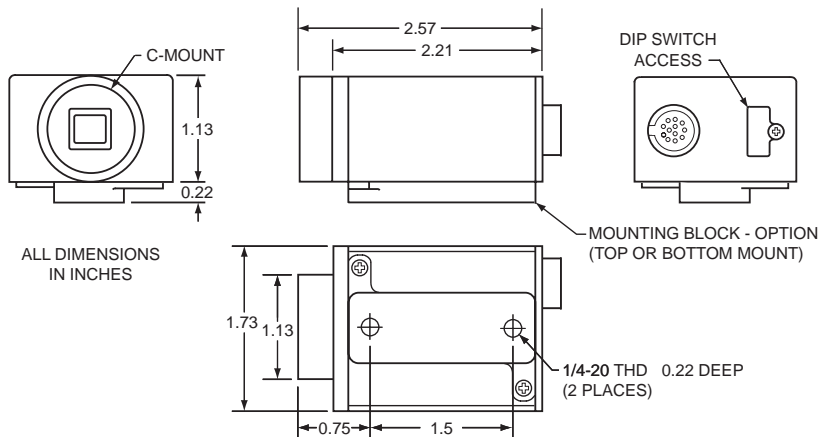
Lenses

Your Cohu representative offers a wide range of lenses for many applications.

Accessories

1310398-212 Hirose mating connector
8427-7 Mounting Block, top or bottom
8368-4 115VAC to 12VDC power supply

DIMENSIONS



COHU

Cohu, Inc. / Electronics Division

ISO 9001 Certified

Cohu reserves the right to change specifications without notice.

