

# 1300 SERIES HIGH PERFORMANCE COLOR CCD CAMERA

## SPECIFICATIONS

### ELECTRICAL

#### Imager

Single interline transfer CCD with matrix filter (cyan, yellow, magenta, green)

#### Image Area

6.4 x 4.8 mm (1/2" format)

#### Active Picture Elements

NTSC: 768(H) x 494(V)

PAL: 752(H) x 582(V)

#### Resolution

NTSC: Horizontal 460 TV lines

Vertical 350 TV lines

PAL: Horizontal 450 TV lines

Vertical 415 TV lines

#### Sensitivity

3200 K faceplate illumination.

6.5 lux at full video, AGC Off

0.3 lux at 80% video, AGC On

.08 lux at 30% video, AGC On

#### Shutter

Internal DIP switch, 1/60 to 1/10,000, 8 steps

Electronic Shutter (Optional)

1/60 to 1/15,000 sec. auto-

compensates for scene illumination

#### Integration

Externally controllable 1/60 to 16 sec.

#### Gamma

0.6

#### AGC

0-20 dB (on/off), selectable (local/remote)

#### Signal-to-Noise Ratio

48 dB (AGC off, NTSC with 4.5 MHz filter)

#### Video Output

Encoded: NTSC and PAL, 1 V p-p @ 75 ohms, unbalanced, composite

#### Auto Lens Output

Controls auto iris lens

#### DC Iris Option

Controls aspherical lens

#### Color Balance

Automatic, through-the-lens type, less than 10 IRE units unbalance from 2850 to 5800 K

Local/Remote Manual White Balance

#### Synchronization Options

NTSC or PAL, crystal, genlock, or phase adjust linelock

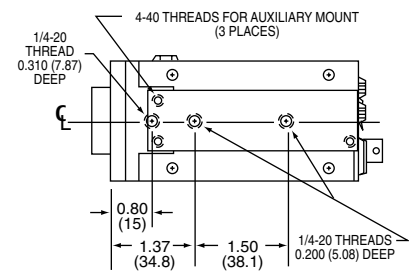
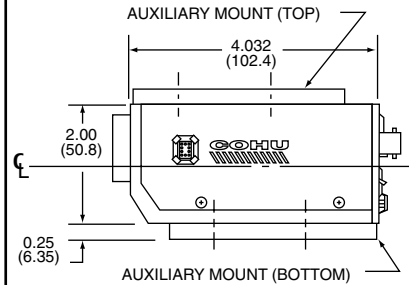
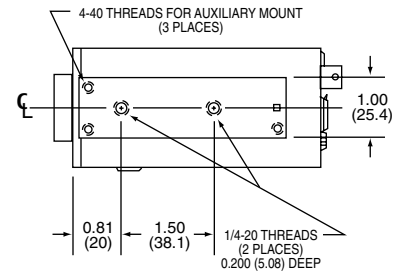
#### Power Requirements

12 VDC or 12 VAC

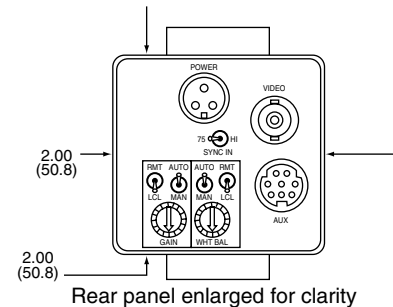
#### Power Consumption

7.5 W

### DIMENSIONS



All dimensions in inches and (mm)



Rear panel enlarged for clarity

### ENVIRONMENTAL

#### Ambient Temperature Limits

Operating: -20° to 50° C, -4° to 122° F

Storage: -30° to 70° C, -22° to 157° F

#### Humidity

Up to 95% relative, non condensing

#### Vibration (less lens)

Per Mil-STD-810(E), Method 514.4,

Categories 1, 4, 5, 8, 9, 10

#### Shock (less lens)

No damage to 30g, 11ms duration

No crash hazard to 75g, 11ms duration

This camera is available in 3" and 4 1/2" sealed and pressurized environmental enclosures. Contact your Cohu representative for full information.

### MECHANICAL

#### Weight

10 oz. (280g)

#### Lens Mount

C/CS standard

#### Camera Mounts

1/4-20 female, top and bottom

#### Connectors (NTSC and PAL)

Video Out: BNC

Lens Drive: 4 pin

Power In: 3 pin connector

Remote: 8 pin mini-DIN

#### Rear Panel Adjustments

AGC on/off/remote

Manual Gain Control

Auto/Manual/Remote White Balance select

Manual White Balance adjust

### ORDERING INFORMATION

## 13X

#### Configuration

2 NTSC (60 HZ)

3 PAL (50 HZ)

## X

#### Power Option

2 12 VDC

3 12 VAC

## -X

#### Sync

1 NTSC XTAL

2 NTSC Genlock

3\* NTSC Phase

Adjust LL

5 PAL XTAL

6 PAL Genlock

\*Requires Power Option 7

## X

#### Iris Options

0 Auto Iris

3 Elec. Iris NTSC

4 DC Iris

5 Elec. Iris PAL

## 00

#### Unassigned

## /XXXX

#### Lens Options

0000 None

Contact factory for full lens selection



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**COHU**  
 Cohu, Inc., Electronics Division

# HIGH PERFORMANCE COLOR CCD CAMERAS

## 1300 SERIES

**NTSC/PAL 1/2" On-Chip Microlens  
Interline Transfer Imager**

Cohu's new 1300 Series High Performance Color Cameras offers the ultimate in color vibrancy, picture clarity, and reliability. With a resolution of 460 horizontal lines (450 PAL), and a size measuring only 4" x 2" x 2", the 1300 Series combines the performance edge with a compact size for critical applications such as security, surveillance, and traffic management.

Special on-chip microlens sensor technology dramatically increases sensitivity while reducing blooming. Conveniently located adjustment pots make set up easy and fast. Gain, color balance, and externally-controlled integration setting are available on the back panel. An optional electronic iris feature is available that eliminates the need for an auto iris lens under most lighting conditions.

Designed and manufactured in the U.S.A., the 1300 Series cameras pack traditional Cohu engineering and technology excellence into a small and affordable enclosure. Cohu, Inc./Electronics Division is ISO-9001 certified.

### APPLICATIONS

- Surveillance
- Perimeter Security
- Access Control
- Traffic Surveillance
- Bridges and Tunnels
- Inspection and Toll Plaza
- Mass Transit Systems



*The Cohu 1300 Series features high performance color video in an exceptionally small enclosure.*

### FEATURES AND BENEFITS

- On-Chip Microlens Interline Transfer Sensor provides high sensitivity and reduces blooming and transfer smear
- High Resolution - up to 460 horizontal TV lines (NTSC) for sharper images
- Small Size - only 4" x 2" x 2"
- Integration - externally controllable for low light imaging
- Standard Auto Iris - Electronic iris and DC iris optional
- Convenient rear panel function controls for precision adjustment
- High Signal-to-Noise Ratio provides clear, noise-free images
- 1000:1 Overload Capability prevents light overloads that cause blooming
- AGC for clear images in varying light conditions
- Optional crystal genlock or phase adjustable linelock synchronization
- C and CS lens mounts
- Optional top mounting accessory
- Made in U.S.A. - direct factory support
- Two Year Warranty
- Meets FCC Class B requirements