

Features

- 1/3" Super HAD II CCD Sensor
- Superior Heat Transfer for High Temperature Operation
- Wide Dynamic Range and Excellent S/N Ratio
- High Sensitivity Complementary Color Filter
- High Resolution (470 Horizontal TV Lines)
- White Pixel Compensation
- AGC on-off, Auto White Balance on-off
- Ruggedized for Harsh Environments
- NTSC/PAL or Y/C Video Output
- Miniature Size (Smaller than RSC-A Series, See Drawing)
- High Speed Shutter Control (Auto Iris CCD)
- Reverse Imaging Capable
- RS-232 Remote Interface with many options



General Description

The RSC-B103 is a high resolution camera that offers outstanding color fidelity and full, broadband response for high resolution color applications. This camera is excellent for airborne applications, and other harsh environments. Low light sensitivity is 1.5 lux at F1.4 thanks to the 1/3" Super HAD II CCD Imager. These cameras offer many standard features in a compact package, including composite or Y/C output, high speed shutter, TTL (through-the-lens) auto/manual white balance, reverse imaging, and AGC on/off functionality. A PAL version is also available (RSC-B103P).

The RPS-A77 and RPS-78 are available for operation with MIL-STD-704 power sources. These rugged power supplies provide regulated 12 VDC to the camera from 20-30 VDC unregulated sources.

Specifications

Pick-up Device	1/3" Super HAD II CCD
Picture Elements	768(H) x 494 (V)
Signal Systems	NTSC or Y/C, Selectable
Lens Mounting	17mm, (or C-Mount adaptor)
Sync Systems	Internal/External, HD/VD
Horizontal Resolution	470 TV Lines
Sensitivity	1.5 Lux, @ F1.4 (AGC on)
Shutter Speed	Up to 1/100,000 sec.
S/N Ratio	Better than 48 dB (AGC off)
AGC	On/Off
Power Requirements	10.5-15 VDC, 1.5 W
Weight	3.0 oz (84g)

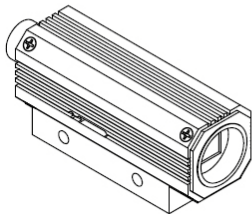
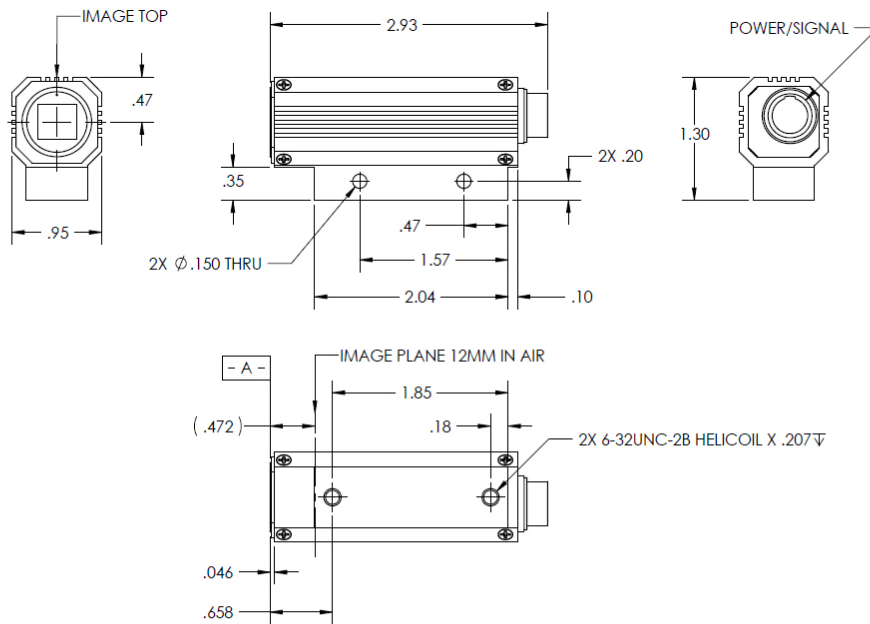
Environmental Specifications

Military Standard:	MIL-STD-810G:
Storage Temperature	-54°C to +85°C (Const & Cycling)
Operating Temperature	-40°C to +55°C startup & continuous
Operating Temperature	-54°C after startup at -40°C
Altitude (Operational)	Sea Level to 60,000 ft
Altitude (Decompression)	8,000 to 40,000 ft, 15 sec**
Humidity (Aggravated)	95% (60°C) to 85% (30°C)
Humidity (Operating)	5% to 95% Relative Humidity (RH) at 30°C (non-condensing)
Explosive Atmosphere	Sea Level & 40,000 ft, +55°C
Vibration (Operational)	Jet Aircraft, 14.2 G's RMS Random 15-2000Hz
	Helicopter, sine on random UH-60 type profile
Acceleration (Operational)	40 G's Forward, 20 G's in other axes
Shock (Operational)	40 G's, 15-23ms SRS Shock 3 shocks each direction
EMI	MIL-STD-461F
	Radiated Emissions (RE102) Fixed Wing and Helicopter

** Target values this test only. All other tests completed and passed. Consult with Sekai for the latest status / reports.

Specifications are subject to change without notice.

17 June, 2011



ISOMETRIC VIEW

**SEKAI PROPRIETARY INFORMATION
RELEASED TO CUSTOMER
DATE: 3/1/2011**