

Features

- Form, Fit and functional replacement to the Sekai RSC-BC103
- 1/2.9" Global Shutter CMOS sensor
- Superior heat transfer for high temperature operation
- Wide Dynamic Range and excellent S/N Ratio
- High Sensitivity
- High Resolution (470 Horizontal TV Lines) NTSC
- White Pixel Compensation
- AGC (ON/OFF),
- Ruggedized for Harsh Environments
- Selectable NTSC or PAL output concurrent with Y/C analog output
- Miniature size
- RS-232 Remote Interface with many options

General Description

The RSC-CC103 is a NTSC / PAL analog output Near Infrared camera that offers outstanding sensitivity across the visible and near infrared spectrum. This camera offers compatibility with the legacy Sekai RSC-BC103.

This camera is excellent for airborne applications, and other harsh environments. Low light sensitivity is <3 lux at F1.2 thanks to the modern Global shutter CMOS sensor. This camera offers many standard features in a compact package, including composite or Y/C output, high speed shutter, TTL (through-the-lens) auto/manual white balance, and AGC on/off functionality. The camera supports user selectable NTSC or PAL outputs. The RPS-77 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

- 1/2.9" Global Shutter Monochrome CMOS sensor
- Selectable NTSC or PAL output concurrent with Y/C analog output
- Lens Mounting 17mm, (or C-Mount adaptor)
- Sync Systems Internal/External, HD/VD
- Horizontal Resolution 470 TV Lines NTSC
- S/N Ratio Better than 48 dB (AGC off)
- AGC On/Off
- Power Requirements +12V, 3.6 W

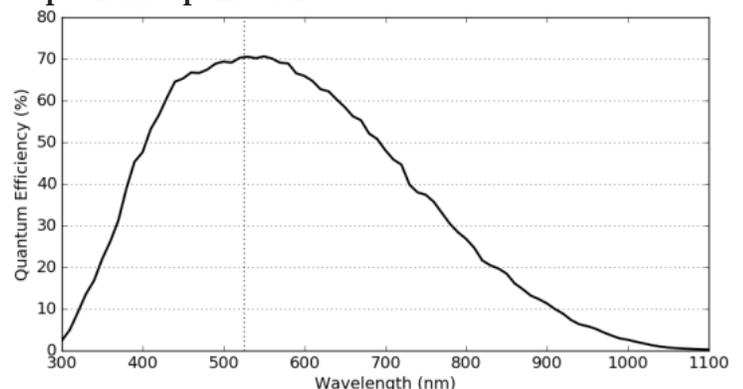


Environmental Specifications*

Military Standard:	MIL-STD-810G
Storage Temperature	-54°C to +85°C (Const & Cycling)
Operating Temperature	-40°C to +65°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 only. Consult with Sekai for the latest status / reports.

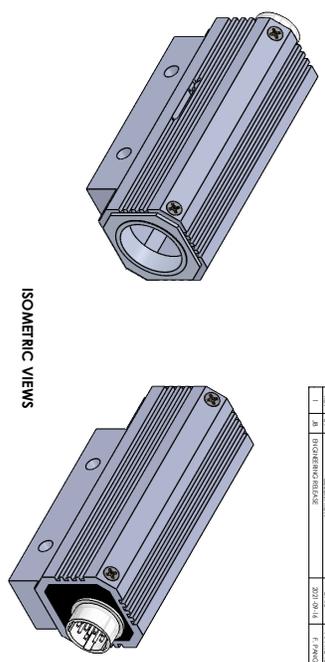
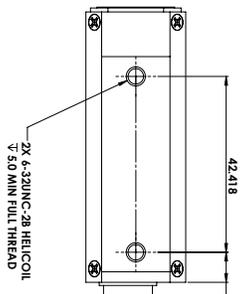
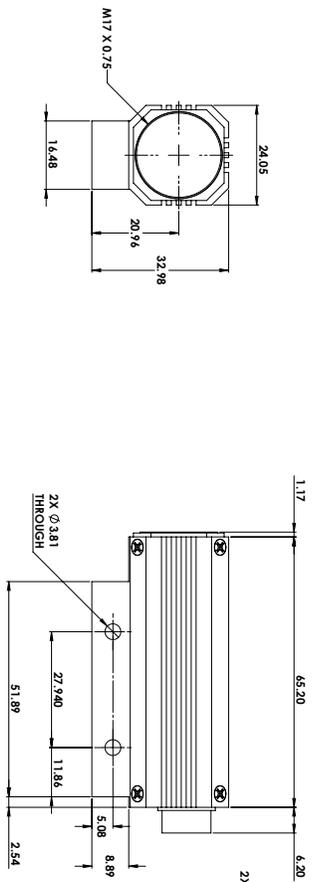
Spectral Response Curve



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- NOTE: UNLESS OTHERWISE SPECIFIED
1. ASSEMBLE PER 800-000882-000-PRO, LATEST REVISION.
 2. FINISH: NONE
 3. ALL DIMENSIONS ARE FOR REFERENCE.

HR100E CONNECTOR HR-10A-10R-12P	FUNCTION
1	12VDC (+) VCC (GND)
2	VIDEO OUT (RETURN) (GND)
3	VIDEO OUT (RETURN) (GND)
4	VIDEO OUT
5	VIDEO OUT
6	VIDEO OUT
7	C. OUT
8	R. OUT
9	RS-232 (RX)
10	RES-232 (GROUND)
11	W. OUT
12	G. RETURN



ISOMETRIC VIEWS

NO.	REV.	DESCRIPTION	DATE	APPROVED
1	01	ENGINEERING RELEASE	2021-09-14	F. PANIC

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MM. TOLERANCES ARE:		CAD DRAWING	
X ± 0.25	XX ± 0.25	DO NOT MANUALLY UPDATE	SEKAI ELECTRONICS INC.
XXX ± 0.127	XXXX ± 0.076	DATE	CAMERA, RUGGEDIZED
ANGLES ± 0.50°	DO NOT SCALE DRAWING	2021-09-14	MONO ANALOG,
FINISH: NONE		DESIGN: F. PANIC	RSC-CC103
HEAT TREAT:		MATL:	8V398
APPROVAL:	HEAT TREAT:	SCALE: 2:1	800-000882-000-01WG
APPROVAL:	HEAT TREAT:	SHEET: 1 OF 1	REV: 1