

Intensified CCD Low-light-level Camera

Model ROS 20/20 ICCD

ICCD

GET HIGH PERFORMANCE, LOW-LIGHT-LEVEL SENSITIVITY,
SPECIAL SPECTRAL RESPONSE AND MORE...with the ROS
20/20 ICCD Camera System.

- Maximum performance
- Superior low-light-level sensitivity
- Special spectral response
- State-of-the-art image intensifier options
 - Gen II+
 - Gen III Ultra Blue
 - Gen III GaAsP



This custom designed video camera features the latest in CCD technology. Choose from a selection of state-of-the-art image intensifier options and maximize the specific performance characteristics required for your underwater viewing application.

ICCD vs. SIT

The ROS 20/20 ICCD outperforms the commonly used SIT camera. Depending on the choice of intensifier, the ICCD is from 100 to 500 times more sensitive and can virtually see in starlight. The ICCD also offers greater blue/green spectral response.

It is highly resistant to shock and vibration, it is smaller in size and weight, and it consumes less power.

Part of a complete system

Like our other ROS 20/20 Camera Systems, the ICCD complements our underwater lights, pan & tilts and can be part of a complete remotely operated video inspection system.

Model ROS 20/20 ICCD Intensified Camera

Specifications

ELECTRICAL

Power Input
Voltage:
11 to 30 volts dc
Current:
Gen II+, Gen III Ultra Blue, or Gen III GaAsP
450 mA Nom.,
@ 12 volts
Gated Gen II+
500 mA Nom.,
@ 12 volts
Gated Gen III Ultra Blue or Gen III GaAsP
ICCD 600 mA Nom,
@ 15 volts
Optional:
Constant current,
typically 50mA higher
than above levels
Composite Video Output:
1.0 volts P-P, nominal
Bandwidth
30 Hz x to 8 MHz
Signal to noise ratio:
45 dB minimum
Video Format:
Standard
EIA RS-170,
525 line, 60 Hz
Optional:
CCIR, 625 line, 50 Hz
Gamma:
1.0 or .45
Option, remote control
Gain, Auto:
30 dB
Option, remote control
Sync, Crystal Controlled Stability:
0.001%
Automatic Genlock:
Auto lock when sync or video signal is received
External Sync Level:
0.6 to 2.0 volts P-P

OPTICAL

Lens Mount:
"C" mount
Intensifier Input Image Format:
1"
Aspect Ratio:
4:3
Standard Intensifier:
Gen III Ultra Blue
Angle of View: (diagonal):

<u>6.5mm</u>	<u>12.5mm</u>	<u>25mm</u>
110°	65°	35°

NOTE: For extending the upper illumination range, lenses with a neutral density spot are available with effective f/no settings greater than 1000.
Remote Focus:
Available with most lens assemblies
Resolution:
500 TV lines, horizontal
350 TV lines, vertical
Shades of Grey:
10
Light Level Sensitivity (faceplate)
Gen II+
10⁻⁶ fc (10⁻⁵ lux)
Gen III Ultra Blue
3 x 10⁻⁷ fc (3 x 10⁻⁶ lux)
Gen III GaAsP
5 x 10⁻⁷ fc (5 x 10⁻⁶ lux)

NOTE: Other sensitivities available through intensifier selection. Gen III sensitivity is as high as 1 x 10⁻⁷ fc (1 x 10⁻⁶) Lux).

MECHANICAL

Typical Size:
3.75" (94mm) diameter
x 12.98" (329.7mm)
long
Weight
In air, 5 lbs (2.19 kg)
In water, 2 lbs (0.875 kg)
Material:
6061-T6 aluminum,
stainless steel or
titanium optional

ENVIRONMENTAL

Operating depth:
4920 feet (1500M)
Optional depths on request
Temperature:
Operating
-22° to +122° F
(-30° to +50° C)
Storage
-31° to +140° F
(-35° to +60° C)

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