

Insite Pacific introduces the **Mini Zeus 4K**, a 4K High Definition CMOS color zoom video camera. The camera incorporates a 1/2.5 inch 4K CMOS sensor that provides greater than 21 times more video information than standard definition cameras with 8,510,000 pixels as compared to 410,000 from standard definition cameras.

The camera is provided in a titanium housing with a 4,500m depth rating as standard with options for full ocean depth rating.

A glass hemispherical viewport and Insite Pacific's exclusive fully water corrected optical lens system corrects for chromatic and geometric distortion, astigmatism, as well as other optical abnormalities. Our proven corrected optical lens system also eliminates zoom and focus tracking errors.

The Mini Zeus 4K provides HD-SDI, 3G-SDI, and 6G-SDI High Definition/4K digital video outputs of 2160p/29.97, 2160p/25, 1080p/59.94, 1080p/50, 1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 720p/59.94, 720p/50, 720p/29.97 and 720p/25, which are all user selectable. In addition focus, iris, and zoom can be controlled via DC voltages, a GUI, or Insite Pacific's Camera/Lens Controller for maximum flexibility.

CWDM compatible SMPTE SDI Rates of 5.94Gbps, 2.97Gbps, and 1.485Gbps are provided by the electrical to fiber optic video converter mounted inside the pressure housing, along with a fiber optic connector mounted on the rear endbell, can provide transmission of the video signal for distances of up to 20Km on a fiber optic cable. SDI video has extremely low latency as compared to typical IP/Ethernet based cameras.

Insite Pacific's optional Camera/Lens Controller allows control of zoom, focus (auto/manual & near/far) and iris (auto/manual & open/close). Zoom is controlled by using a single axis rate control joystick. Focus and Iris are controlled by using a slide potentiometer for precise positional control. The various video outputs of the camera and white balance are selectable via the Control Unit. Communication between the hand control unit and the camera is selectable for either RS232 or RS485 comm's. Positional feedback from the camera for lens focus, iris, and zoom settings are available outputs of the control unit.



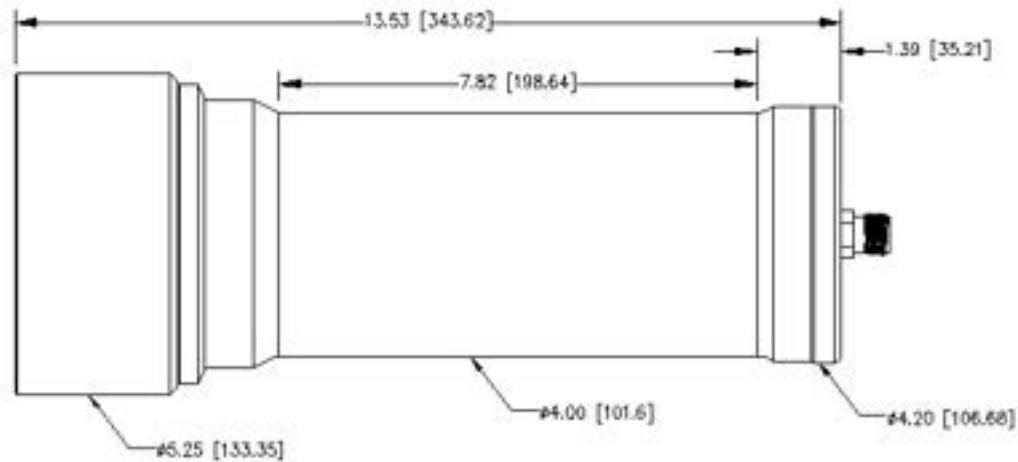
Features

- ❑ 4K High Definition Video
- ❑ Super Wide 130 Degree Diagonal Angle of View
- ❑ 1,000 Meter to 7,500 Meter Depth Ratings
- ❑ HD-SDI, 3G-SDI, and 6G-SDI Digital Video Outputs
- ❑ Extremely low latency, uncompressed video
- ❑ Close Focus of Front of the Dome at Zoom Full Wide
- ❑ Close Focus of 8" (203.2mm) at Zoom Full Tele
- ❑ Glass Hemispherical Viewport with Insite Pacific's Exclusive Fully Corrected Optics

Applications

- ❑ Offshore Oil & Gas Industries
- ❑ Underwater Documentaries
- ❑ High Resolution Inspection In Restricted Access Areas
- ❑ Marine Archaeology
- ❑ Oceanographic Research
- ❑ Military
- ❑ Underwater Metrology

Insite Pacific - Mini Zeus 4K



All dimensions in inches [millimeters]

Specifications:

Electrical

Camera Power:	15-30 Vdc, 350 mA nominal
Sensor:	1/2.5 inch Exmor R CMOS
Picture Elements:	8,510,000 Pixels
Minimum Illumination:	0.06 lx (1/4 sec (1/3 sec), 50% High Sensitivity mode On)

HD-SDI, 3G-SDI, & 6G-SDI Video Formats:	2160p/29.97, 2160p/25, 1080p/59.94, 1080p/50, 1080p/29.97, 1080p/25, 1080i/59.94, 1080i/50, 720p/59.94, 720p/50, 720p/29.97, 720p/25
---	--

CWDM Wavelength Options:	1270nm, 1290nm, 1310nm, 1330nm, 1350nm, 1370nm, 1390nm, 1410nm, 1430nm, 1450nm, 1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm, 1590nm, 1610nm.
--------------------------	---

Fiber Optic Tx Power Output:	0 to +5dBm
Fiber Optic Receiver (Rx) Sensitivity:	-14 dBm
Focus / Zoom / Iris:	Remote control
Focus Range (At full wide):	Front of Dome to Infinity
Focus Range (At full telephoto):	8" (203.2mm) to Infinity
Iris Range:	F2.0 to Closed
Lens:	4.4 mm to 88.4 mm, 20X Optical Zoom lens

Angle of view in water:	Wide angle (4.4mm)	Telephoto (88.4mm)
Diagonal	130.4°	7.7°
Horizontal	124.1°	6.7°
Vertical	93.3°	3.8°

Mechanical

Dimensions above & weights below are for the 4.5Km depth rated housing.

Weight In Air:	6.35 kg (14.0 lbs)
Weight In Water:	3.29 kg (7.25 lbs)
Housing Material:	6AL / 4V Titanium
Viewport:	Hemispherical Glass (Optically Polished, Water Corrected)
Connector:	Customer specified

Environmental

Depth:	1,000 to 7,500 meter depth rated housings available
Operating Temperature:	0°C to +60°C (32°F to 140°F)
Storage Temperature:	-20°C to +60°C (-4°F to 140°F)



CAMERA CONTROL UNIT

All specifications are subject to change in line with Insite Pacific's policy of continual product development.

INSITE PACIFIC Inc.

6837 Nancy Ridge Drive, Suite G, San Diego, California, 92121, USA

Phone (858) 523-0642 Fax (858) 523-0643

Website: www.insitepacific.com Email: sales@insitepacific.com

Issue February 8, 2019