

SMART CAM – High Definition IP Camera



FEATURES AND BENEFITS

- ✓ 2,000m (anodized Aluminum) & 6,000m (Titanium) depth rated housing
- ✓ Ethernet port for an easy integration with existing systems
- ✓ High data rate transfer (GigE Vision)

Compatible with FORSSEA V-LOC positioning software!



PRODUCT DESCRIPTION

- The **SMART CAM HD 2000 & 6000** designed by FORSSEA ROBOTICS is a low cost fixed focus IP High Definition camera.
- With a wide horizontal angle of view of 100° in water, this camera is ideal to equip ROV/AUV for underwater inspection or stereo embedded vision.
- The focal length is easily adjustable to capture images at very close range.
- The camera comes fully calibrated with software lens distortion correction.
- Information processing facilitated by Ethernet output makes this device perfectly adapted to **COMPUTER VISION** and **ARTIFICIAL INTELLIGENCE** (Machine Learning) applications.
- Multiple cameras can be connected on the same Ethernet network (PTP). LED option on demand.

APPLICATIONS

- ✓ ROV systems
- ✓ Trencher systems
- ✓ Crawler systems
- ✓ 2D/3D stereo vision
- ✓ Computer vision (ML)
- ✓ Target identification
- ✓ Augmented reality
- ✓ Photogrammetry

TECHNICAL SPECIFICATIONS

ELECTRICAL

| | |
|-------------------|---|
| Voltage | 10-32 VDC |
| Power consumption | 2.5 W maximum |
| S/N ratio | < 41 Db |
| Standard wiring | 13 pins : 8 pins for ethernet ; 2 pins for 24V ; 1 for sync. (stereo) ; 2 free pins |
| Data transfer | Ethernet GigE Vision |

OPTICAL

| | |
|------------------------------------|---|
| Sensor | 1/3" CCD Sony ICX692 |
| Absolute sensitivity threshold (γ) | 18.07 |
| Resolution | 1288 x 728 px / 0.9 MP / 30 FPS (higher resolution available on demand) |
| Standard focal distance | 7.7 mm |
| Angle of view | 100° (horizontal) ; 73° (vertical) |

MECHANICAL

| | |
|------------------|--|
| Housing material | Hard Anodized 6061-T6 Aluminium (2,000m) // Titanium Gr5 TA6V (6,000m) |
| Window material | Sapphire glass |
| Weight | 0.6-0.3 kg (Aluminum); 0.9-0.6 kg (Titanium) |

ENVIRONNEMENTAL

| | |
|-----------------------|-------------------|
| Depth rating | 2000 m and 4000 m |
| Storage temperature | 0°C to 45°C |
| Operating temperature | -30°C to 60°C |