

ecotone

Hyperspectral ocean vision



UHI Ocean Vision 2000 / 3000 / 6000

Using Underwater Hyperspectral Imaging (UHI)
you can objectively reveal the hidden
information of the seabed.

Read more about the UHI technology:
ecotone.com

UHI application

The UHI technology is ideal for identification, classification and monitoring of objects, areas and organisms in marine environments.

Ecotone is the sole provider of such technology.

Ecotone offers both hardware and software to scientists and researchers that wish to explore the following areas:

- identification and mapping of species and habitats, based on spectral signatures
 - Marine biology, e.g. corals, kelp and seagrass, sponge aggregations
 - Marine archeology
 - Minerals
 - Sedimentation
- results can be processed into interactive GIS-systems

UHI OV 2000 / 3000 / 6000 - Technical Specifications

Depth rating	2000 m	3000 or 6000 m
Imager Specifications		
Imaging range	0.2 m - 5.0 m	0.2 m - 5.0 m
Imager frame rate	0.1 - 90 Hz	0.1 - 90 Hz
Field of view transverse / Longitudinal	~ 60 ° / ~ 0.4 °	~ 60 ° / ~ 0.4 °
Camera resolution	1936 spatial pixels	1936 spatial pixels
Analog to digital converter (ADC)	12-bit	12-bit
Spectral range	380 - 750 nm	380 - 750 nm
Diffraction limited spectral resolution	2.2 - 5.5 nm	2.2 - 5.5 nm
Spectral bands	150 - 200 wavebands	150 - 200 wavebands
High definition video	5MP video 2592 x 1944 pixels	5MP video 2592 x 1944 pixels
Focus range	0.2 m - ∞	0.2 m - ∞
Interface Specifications		
Communication	Ethernet	Ethernet
Input voltage	12 to 72 VDC	12 to 72 VDC
Internal computer storage	1 TB (2 TB optional)	1 TB (2 TB optional)
Power consumption	Max. 35 W (20W typical)	Max. 35 W (20W typical)
Optional		
AHRS (Altitude and heading ref. system)	Heading roll, pitch, yaw	Heading roll, pitch, yaw
Connector for altimeter or viper		
Software Specifications		
Data acquisition and preprocessing	Onboard autonomous software	Onboard autonomous software
Sensor control and data monitoring	"Immersion", topside control software	"Immersion", topside control software
Raw data file format	HDF5 format, ENVI-compatible	HDF5 format, ENVI-compatible
Mechanical Specifications		
Weight (air/water)	9.0 / 4.2 kg	11.1 / 6 kg
Size (Length x Diameter)	338 x 135 mm	355 x 135 mm
Connector Type	Subconn DFCR2013M and MCBH8F	Subconn DFCR2013M and MCBH8F
Housing Material	Aluminium	Titanium

Contact information • sales@ecotone.com • Tel: +47 911 89 395 • ecotone.com

Ecotone AS • sales@ecotone.com • ecotone.com