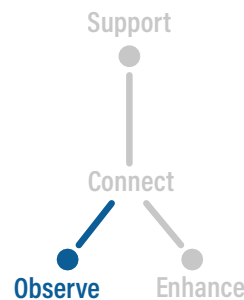# Octopus

Flagship 360° PTZ Vision System

The most capable and charismatic aquatic vision system on the planet. Featuring CleanSweep™ self-cleaning technology and fully-controllable optics, the Octopus produces superb live underwater video for research, education and public engagement.

The Octopus will transport your viewing audience beneath the waves.

With stunning visuals and minimal fuss, this expansible IP-based vision system is the ideal centerpiece for a View Into The Blue® underwater observatory.

Its patented self-cleaning technology eliminates the need for frequent maintenance, enabling uninterrupted long-term monitoring and data collection.

Support

Connect

Observe

Enhance

Imaging
1080p HD video, 30fps
Time-lapse images

Camera controls
360° pan & tilt
Optical zoom
Focus & autofocus
Guard tours

Outputs
TCP/IP video protocols
AAC audio

Power
90-250 VAC, 50/60 Hz
12-48 VDC
15 W max

Housing
Acetal and glass
Depth-rated to 50 m

Cable length
≥2 km w/BelugaLink

Features

- Long-term, continuous monitoring
- Stream direct to YouTube & Vimeo
- Intuitive interactive controls
- Self-cleaning optical surfaces
- External sensor integration
- Versatile mounting & mooring
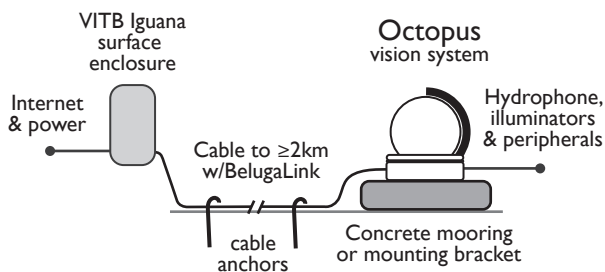
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engineering

Octopus Flagship Self-Cleaning 360° PTZ Vision System   Specifications

The Octopus is a unique cabled, IP-based vision system that offers superb underwater video streaming to scientists and the public. Backed by nearly two decades of deployments and continual design refinements, it is perhaps the most capable long-term visual monitoring tool for use underwater.

An intuitive web-based interface allows for remote control of 360° pan, tilt and zoom, establishing viewpoints, managing automated viewpoint tours and collecting time-lapse imagery. Enhance awareness and public engagement by live-streaming HD video and captivating underwater audio to a targeted or worldwide audience.

Specification	Details
Imaging	1080p HD (1920x1080) 30 fps video Flexible time-lapse image programming
Streaming	IP video/audio streaming protocols RTSP, RTMP, RTMPS & HLS H.264, MJPEG compression
Audio	Optional hydrophone AAC-LC & LPCM, 32 kHz
Camera controls	360° pan, tilt and optical zoom Remote focus and autofocus Auto/manual low-light mode Programmable viewpoint tours ONVIF S/G compliant
Self-cleaning	Mechanical wiper-based cleaning No toxic antifoulants Scheduled intervals & on demand
Power	Pair with VITB Iguana surface enclosure 90-250 VAC, 50/60 Hz 12-48 VDC solar/alternative 15W max
Cable length	≤70 m, standard Ethernet ≥2,000 m with BelugaLink
Housing	Acetal and borosilicate glass 30x37x69 cm, 16.3 kg in air 50 m depth rating
Mounting	Standard and customized mounting solutions Affix to mooring blocks, pilings and more
External peripherals	Optional external illuminator(s) Connect TCP/IP and/or serial devices
Deployment duration	Unlimited w/occasional supplemental cleaning 2-year expected service interval

Typical Usage

VITB Iguana surface enclosure

Octopus vision system

Internet & power

Cable to ≥2km w/BelugaLink

Hydrophone, illuminators & peripherals

cable anchors

Concrete mooring or mounting bracket

CleanSweep™ Self-Cleaning

Coral Reef Restoration and Monitoring