

# INKA Iris

CATHX

OCEAN

## ADVANCED IMAGING & INTELLIGENCE SYSTEM

For Shallow Water Vehicles

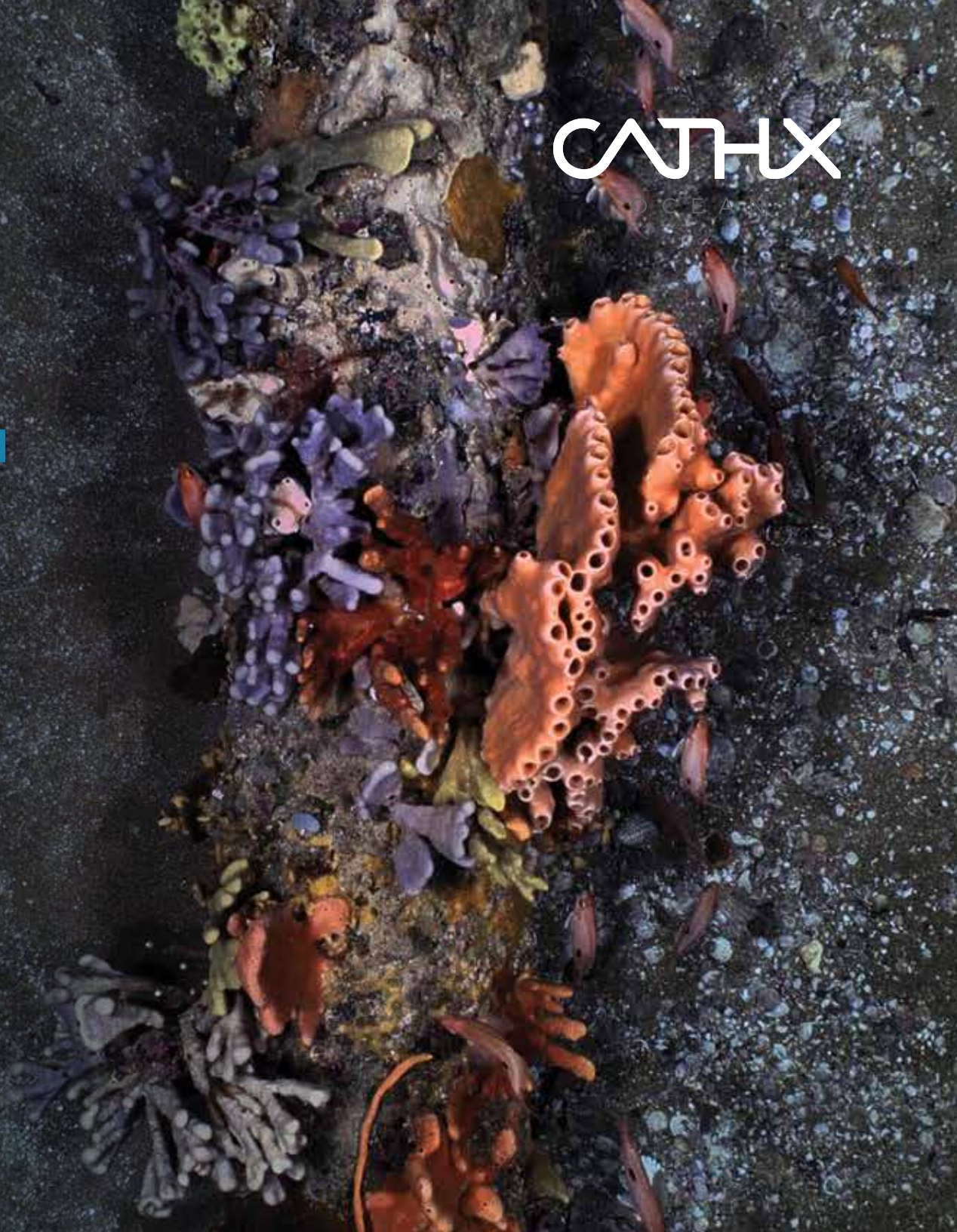
*Depth Rating 1,000m*

### OPERATIONAL CAPABILITIES

- Ground truth imagery (5K, 4K/UHD, HD)
- Long range up to 10 meters
- Up to 9 linear kilometers per hour
- Up to 8 meter image width
- Onboard intelligence for image processing, data processing workflows, machine vision & AI model inferencing
- Short exposure strobe to reduce the effects of turbidity

### APPLICATIONS

- Critical infrastructure surveillance (linear assets)
- Pipeline survey
- Pre-construction survey
- Environmental survey



# INKA Iris

INKA Iris is a compact, integrated solution for ultra-high resolution imaging for depths up to 1000 meters and speeds of 5 knots

For medium sized AUVs (200+mm diameter) and smaller uncrewed underwater vehicles (UUVs)

## INTELLIGENT SENSOR

16 megapixel sensor with sub-mm resolving power & high colour sensitivity

Configurable resolutions and frame rates from 5K, 4K UHD and HD

INKA hardware for data processing and machine learning on the device

Geo reference inputs

Range inputs provide scale

## INKA HARDWARE

Powerful chipset for ultra-fast Clarity software performance

2TB internal storage to accommodate 70 hours of survey data with no vehicle bandwidth contention

## SYNCHRONIZED STROBES

400,000+ lumens

Strobe lighting dramatically reduces motion blur and reduces the impact of turbidity. This allows large area image collection at high speed



## CLARITY SOFTWARE

Microservices to execute edge-based data processing and machine learning

Mission configuration & control

- Define acquisition workflows
- Browser based UI makes it easy to integrate, no other PC required
- BMP, PNG or JPEG modes
- API for AUV mission profile control

Build-your-own Clarity microservices

