

INKA Node

**INTELLIGENCE
KNOWLEDGE
AUTONOMY**

THE CORE OF
AUTONOMOUS
SUBSEA
INTELLIGENCE

The CATHX INKA Node is a subsea computing node for AI-based data processing enabling autonomous decision-making at the edge.



KEY FEATURES

- Compact form with efficient power and thermal management
- Supporting AI model execution and customizable data processing pipelines
- Depth rated up to 6000m
- 8TB internal storage
- Sensor agnostic

The Edge Node for Subsea Autonomy

INKA NODE TECHNICAL SPECIFICATIONS

OPERATING CONDITIONS

Operating Temperature: -10 to 35 °C

Depth Rating: 6,000 m

Connector: Ethernet/Power CRE Bulkhead

CONFIGURATION, MONITORING, PROCESSING

Mission Configuration: browser-based CLARITY UI

Monitoring (image viewing): via browser-based CLARITY

Processing Platform: NVIDIA Jetson@ AI platform

Onboard Storage: 8 TB SSD

Onboard Processing: onboard real-time via CLARITY

ELECTRICAL

Power Consumption:

- **Idle:** 5W
 - **Nominal** 25W
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Supply Voltage:

- **Nominal:** 24 VDC
 - **Min/Max:** 19-36 VDC
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Power and ethernet managed through single cable interface

COMMUNICATION

Ethernet: Gigabit Ethernet

MATERIAL

Titanium

WEIGHT

- **In Air:** ~2 kg
 - **In Water:** ~1.2 kg
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DIMENSIONS

