



A powerful embedded computer running custom software to maximize stability and provide a user-friendly interface.

Compact powerhouse

The Intel i3 processor delivers high performance and real-time capabilities for critical industrial IoT deployment.

Measuring 240(L) x 242(W) x 85(H) mm with wall mount, makes this versatile and powerful system a compact powerhouse.



Digital connectivity

Wide connectivity options with 2x RS-232/422/485, 8x DI, 4x DO, 4x USB3.0, and 8x Gigabit PoE ports and optional 2x Isolated CAN-Bus/N2K ports.

Built-in PoE

Contains 8 built-in Power over Ethernet (PoE) ports enabling cameras to be connected directly to the control unit. The built-in PoE ports supply the cameras with both power and data connection through the same cable, minimizing cabling requirements.

Built-in GPS

The built-in GPS with G-sensor ensures a reliable positioning recording and time synchronization.

Built-in 4G/LTE and WIFI

Wireless 4G/LTE and Wifi modules, gives the optimal conditions for wireless transfer of data to shore for quick analysis possibilities plus unique live access to the system (while in range), to facilitate system configuration and remote diagnostics.

Secure storage

Dual hot swappable SATA storage with 2TB (Terabytes) HDD capacity drives used by default to provide flexibility in the quantity and quality of the video data to capture. Higher capacity SSD drives can also be supplied. All data is stored in encrypted formats.

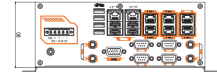
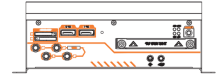
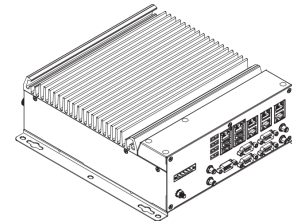
UPS

Internal battery (UPS) backup power, keeps the system alive through short power failures. It also ensures the system shuts down properly and logs if it was turned off on purpose. An external UPS can also be supplied to enable the full system, including 8 cameras, to be powered for over 15 minutes.



Anchor Lab

Copenhagen



Configure per vessel

IP Cameras

The system supports IP cameras, that uses the powerful H.264 and H.265 video encoding to minimize storage usage. Resolution, video frame rate, and image quality, as well as advanced camera settings (including privacy masks and people blurring) can be defined for each camera individually.

Supported sensors

Through the system's digital connectivity various sensors can be added based on the monitoring needs of individual fisheries. Supported sensors include: inductive proximity (winch), hydraulic pressure, current draw, ultrasonic range, on/off relay, knife valves, depth (echo sounder), weather station, motor effect and fuel rate, plus crane and platform scales integration and camera base motion and object detection.

Optional extras

Satellite integration

Integration with VMS units is supported to enable status and event information to be transmitted ashore, even while outside of cellular connectivity range. Connectivity over satellite communication modules is supported with different strategies depending upon available bandwidth.

On-board AI

The Black Box Video system can be extended with a VPU (Visual Processing Unit) to enable complex AI models to be executed directly upon the on-board hardware. A plugin structure of the Black Box Video firmware enables fishery specific models to be available on a per system basis.

External PoE switch

The Black Box Video system can enable support for more than 8 cameras through the use of an external PoE switch. Such a switch can also be used on larger vessels to ease cabling challenges.