Eddyfi Technologies
Beyond current

Technical Specifications

ICON CONTROLLERS

Rugged and Portable Controllers for Inspection Camera and Robotic Crawler Systems

ICON™ controllers have been specifically designed to withstand difficult environments. Built in a pelican transport case, they offer maximum protection when shut closed, while also being convenient for transport.

MULTI-TASKING

ICON controllers offer different levels of power for different systems, some are very light and portable while others are made for fixed installations in a control center. In any case, controllers offer great processing speed and are capable of exporting video in the background while performing the inspection. There is no need to wait several minutes/hours when your job is done; simply pack and go.

CLEAR AND PRECISE DISPLAY

All controllers come with a very high-quality display that is both large and sunlight readable. You can quickly assess and validate areas of interest when doing an inspection. The screen size, brightness, and resolution allow for a clear look at the data versus a smaller handheld display.

ICON controllers have been designed to be flexible and adaptable for a wide range of remote visual inspection and robotic applications.

ICON SOFTWARE ECOSYSTEM

All systems whether it's a camera, a crawler, or a custom solution use the same ICON software. Very user friendly and quick to setup, simply load the appropriate configuration file and ICON will display the appropriate control dashboard for you.

The standard dashboard is not optimal for your application? No need to worry you can customize any dashboard specifically for a job or a group of users. Simply layout the tiles you want, the way you want them and save your new configuration.

Figure 1: ICON software at job site.

APPLICATIONS

- User friendly interface
- Live video stream
- Job grouping and recording
- Snap pictures while recording
- Defogging, zoom, brightness, focus control
- Variable lighting and laser line control
- Automation routine
- Simple reporting
- Joystick, touchscreen, or keyboard control
- Customisable user group
- Background exporting

Some features might require higher ICON tier, contact your sales representative for more information.

THE CONTROLLER THAT WORKS FOR YOU

Depending on your system a wide range of controllers might be available, depending on the operation condition you might want to go with one versus another.

IC100

The new IC100 is the most portable and compact ICON controller, designed for camera-only systems. If you're looking for a controller to move around that still offers outstanding image quality and live video feeds, the IC100 is the ideal solution.

Figure 2: IC100 controller.

Figure 3: IC500 controller.

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If you need something a bit more powerful to operate an inspection crawler system while still being able to use camera-only systems, you should consider the IC500. Slightly larger than the IC100, it is also portable and comes in a pelican case. The IC500 can output more power than the IC100 making it capable of operating longer tether for camera-only systems and a wide range of small and medium class crawlers. It's simply the most versatile controller.

HIGH-POWER CONTROLLER

If you are looking for more power and to operate large class crawler systems, then the High-Power controller is for you. It comes in an 8U rackmount transportable case for practical on-site deployment. It has enough power to drive any large class system up to in 1km (0.6m) but is less portable than the IC100. The High-Power controller has been designed using rackmount components, and configurations are available that can be installed in a standard rack within a service van or fixed control center.

Figure 4: High-Power controller.

SPECIFICATIONS

	IC100	IC500	HIGH-POWER CONTROLLER
Operating Power	Input = 100–240 VAC, 50/60 Hz Output = 48V DC/100W (max)	Input = 100–240 VAC, 50/60 Hz Output = 70V DC/450W (max)	Input = 100/240 VAC, 50/60 Hz Output = 350V DC/1000W (max)
Computer	Intel i5 ,16 GB RAM, 1000 GB SSD	Intel i7, 16 GB RAM, 500 GB SSD	Intel i7, 16 GB RAM, 1 TB NVMe internal, 1 TB Removable SSD
Screen	15.6 in FHD touchscreen, 1000nits	17.3 in FHD touchscreen, 1000nits	17.3 in FHD, 1000nits
I/O	• Bluetooth 5.1 • Wi-Fi 6 (802.11ax), 2.4/5 GHz • Gigabit Ethernet • 1 × USB 3.0 • 1 × USB 2.0 • 1 × Tether connector	• Gigabit Ethernet • 1 × USB2.0 • 1 × USB3.0 • 1 × HDMI • 1 × Tether connector	• Bluetooth 4.2 • Wi-Fi (802.11ac) Front: • 2 × SATA Bays (1TB SSD in one) • 4 × USB 3.1 Gen 1 • 2 × USB 2.0 Rear: • 2 × Gigabit Ethernet • 1 × DVI (used for the monitor) • 1 × HDMI • 1 × DisplayPort • 1 × Tether connector • 2 × USB 3.1 Gen 1 • 4 × USB 3.1 Gen 2 • 1 × Serial • 2 × SD video camera receivers
Feature and Control	Emergency Stop	Remote Controller Keyboard	Remote Controller Integrated Keyboard 400V GFD and PS fault detection
Temperature	Operating temperature: 0 °C–45 °C (32 °F–113 °F) Storage temperature: -10 °C–60 °C (14 °F–140 °F)	Operating temperature: 0 °C–45 °C (32 °F–113 °F) Storage temperature: -10 °C–60 °C (14 °F–140 °F)	Operating temperature: 0 °C–45 °C (32 °F–113 °F) Storage temperature: -10 °C–60 °C (14 °F–140 °F)
Weight	9 kg (20lb)	22.7kg (50lb)	52.2kg (115lb)
Dimension	40 × 33 × 18cm (15.75 × 13 × 7in)	62 × 49 × 22cm (24.4 × 19.3 × 8.7in)	700 × 575 × 740mm (27.5 × 22.5 × 29in)

SYSTEM COMPATIBILITY

IC100	IC500	HIGH-POWER CONTROLLER
• Spectrum cameras • Specialty cameras; handheld and push cameras • Up to 100m (328,08ft) of tether • Tether encoder input	• Small class vehicles; VT-I50 • Medium class vehicles; VT-M310, VT-P205, VT-I100, VT-Y200 • Spectrum cameras • Specialty cameras; handheld and push cameras • Up to 300m (984,25ft) of tether • Encoder input	• Large class vehicles; VT-M460, VT-P320, VT-I150, VT-Y380 • Up to 1km of tether • Winch tether management • Encoder input

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