



Everest Ca-Zoom HD inspection camera + transport box

Everything you need for confident nuclear inspections. All in one box.

When you're performing demanding inspections at PWR and BWR nuclear power plants, accuracy and efficiency are everything. Meet the radiation-tolerant **Everest Ca-Zoom HD camera**. With its all-in-one transport box, it's a convenient alternative to lugging around two heavy pieces of equipment. Whether you're conducting a remote underwater or in-air inspection, you can be sure the Everest Ca-Zoom HD camera will help you get it done faster—so you can keep radiation exposure at a minimum.

 **Waygate
Technologies**
a Baker Hughes business

Superior image quality

The radiation-resistant Everest Ca-Zoom HD camera delivers crystal-clear images in full HD resolution to ensure clear and detailed footage. And with 30x optical zoom, you're able to zoom in on the most remote defects with unparalleled precision. Even in low-light environments the HD camera delivers, thanks to four integrated 2980 Lumen LEDs—the most powerful on the market.

Replaceable camera module

Downtime for camera repairs is a thing of the past. The field-swappable camera system allows you to switch out camera modules in hours and not days, getting you back to inspections faster than ever. No need to send the entire unit in for repairs. Our field-swappable camera system keeps your inspections running smoothly, maximizing efficiency and minimizing downtime.

Unparalleled portability

The all-in-one wheeled transport box makes traveling and setup at nuclear inspection sites quick and easy. Weighing in at just 21kg (46lb), the system is easily handled by one person and includes everything needed to tackle nuclear inspections, from the camera heads to the cables and accessories. The Everest Ca-Zoom HD camera even offers a backpack option so you can access the most challenging inspection points with little effort.

Easy to use

A large HD display control pendant allows for easy and convenient operation of the camera, which automatically focuses, adjusts shutter speed, and fine-tunes aperture for flawless image capture in every scenario. All to make your inspections fast and accurate.



Camera head specifications

	PTZ HD	TZ1
Resolution, Image sensor	Full HD (1920x1080), 1/2.8-type CMOS 2.38 MP	Full HD (1920x1080), 1/3-type CMOS 4.08 MP
Zoom	30x optical / 12x digital	10x optical
Field of view (in air)	63.7° wide-end - 2.3° tele-end	59.2° wide-end - 6.7° tele-end
Focal length	4.3 mm to 129 mm	3.3 mm to 33 mm
Minimum focus distance	10 mm (wide end), 1200 mm (tele end)	50 mm (wide end), 800 mm (tele end)
Sensitivity	1.4 lx	0.5 lx
Pan	continuous 360°	-
Tilt	338° (-169° to +169°)	227° (-104° to +123°)
Illumination	"4 LEDs total max. 2980 lumen Brightness at 1m: 5200 lx, at 3m 650 lx"	"2 spot-lights, 2 flood-lights, total max. 988 lumen Brightness: at 1m 1600 lx, at 3m 177 lx"
Light Control	two LED pairs on-off control	spot and flood individually controlled
Dimensions	(LxWxH) 246 mm x 117 mm x 113 mm (9.7" x 4.6" x 4.5")	(LxWxH) 125 mm x 66 mm x 72 mm (4.92" x 2.59" x 2.83")
Minimum opening diameter	130 mm (5.11")	98 mm (3.86")
Weight	3.5 kg (7.72 lbs)	0.74 kg (1.63 lbs)
Operating temperature	0° C ... 45°C (32°F ... 113°F)	0° C ... 40°C (32°F ... 104°F)
Radiation Tolerance	Total dose (cumulative): 42,500 rad (425 Gy) Radiation tolerant: 2,000 rad/h (20 Gy/h)	N/A
Ingress Protection	IP68, Waterproof to 50 m (when pressurized)	IP65
Cable options	10m / 30m / 70m (33 ft / 100 ft / 230 ft)	10m / 30m (33 ft / 100 ft)
Laser	Integrated parallel laser lines for sizing	Integrated parallel laser dots for sizing
Construction	Anodized aluminium	Anodized aluminium

Peripherals specifications

Control Box	
Power	External Power Adapter, 100-240V (47-63Hz), 150W
Dimensions	165 mm x 90 mm x 175 mm (6.49" x 3.54" x 6.89")
Weight	1.64 kg (3.61 lbs)
Pendant Controller	
Computer	Intel Core i5-7300U, 8GB DDR3L SDRAM
Storage Capacity	SSD 256 GB (>6 hours video recording)
Screen	1920 x 1200, Bright rugged touchscreen, 800 cd/sqm
Dimensions	400 x 200 x 95 mm (15.75" x 7.87" x 3.74")
Weight	2.02 kg (4.45 lbs)
Cable to Controller	5m (16.4 ft) - pendant power and communication
Ingress Protection	IP65
Interfaces	2x USB A, RJ45 Ethernet, 1 HDMI
Battery Capacity	4080 mAh
Controls	Physical joysticks and buttons on each side for access of main functions, integrated active pen (stylus)
Packaging / Transport	
Hardshell Transport Box	"690 mm x 380 mm x 358 mm (27.13" x 14.96 x 14.09")", 21 kg (46.3 lbs) Holds: PTZHD30 with 10m cable, TZ1 with 10m cable, controller, pendant with 5m cable, power adapter, CO2 pump and cartridges"
Hardshell Backpack (optional)	"542 mm x 402 mm x 220 mm (21.33" x 15.82" x 8.66")", 12.5 kg (27.5 lbs) Holds: Either PTZHD30 or TZ1, controller, pendant, power adapter, CO2 pump and cartridges, 10m camera cable strapped to outside"
Options and Add-Ons	
Deployment Poles	6 ft and 3 ft threaded carbon fibre pole-segments, diameter 29 mm (1.14")
Ball Joint Flange Mount	Tripod with ball-joint swivel for carbon fibre poles
Pressurization Kit	2.5 bar pressurization pump with CO2 cartridges (for underwater use of PTZHD30 camera)