

**Everest Mentor Flex VideoProbe**<sup>™</sup>

# Faster. More Accurate. Better.



# Streamlined to simplify the complex.

## It's that simple.

As the worldwide leader in remote visual inspection (RVI) and video borescope technology, our intention has always been to empower inspectors to solve the complex with effortless simplicity.

With mounting demand to get inspections done quicker and cheaper, without compromising the accuracy of the results, most equipment can't withstand the pressure. Combining portability with military-grade durability, the Everest Mentor Flex answers the call with the features you've always wished you'd had, for the tasks that demand it all to help you make smart decisions, fast.

# Raise the bar with an unrivaled digital inspection.

More precise and efficient everyday inspections are now possible with Waygate Technologies' Everest Mentor Flex VideoProbe<sup>™</sup>. And when you've got great image quality to easily identify defects and tools that eliminate the hassle, inspections become faster than ever before.



Save time, improve quality, and streamline the decision-making process at every level.

- Virtual keyboard for faster annotation.
- Multi-point touchscreen allows pinchto-zoom and swipe-and-pan gesture functionality.
- Menu Directed Inspection (MDI) improves efficiency with auto-tagging and automatic report generation.
- **Smart Naming** automatically annotates images and provides smart file names.



Meet measurement requirements with quality and evaluate defects in depth.

- Stereo measurement provides accurate analysis as you work.
- New MTD feature calculates optical tip-to-target distance and Dynamic Advisory System provides real-time guidance to increase measurement accuracy.
- **Comparison measurement** checks the approximate size of defects quickly.



Navigate inspections thoroughly, and accurately, at a fraction of the time and cost.

- Responsive and powerful articulation.
- **Upgraded articulation design** founded on high-power steering motors.



Expect top performance in even the harshest environmental conditions.

- Light, **portable**, and ergonomic design.
- Constructed with ultra-durable, military-grade magnesium housings.
- Third-party tested.

# This is what visible confidence looks like.

The Everest Mentor Flex delivers cutting-edge TrueSight<sup>™</sup> image clarity for more accurate assessments and increased probability of detection (POD). Expect high-quality, detailed images showcasing indications that were previously undetectable. See for yourself.

## Subscribe to peace of mind.

Downtime is costly, but with flexible service offerings like our Flex subscription and Visual Care Plan, you'll have the coverage to keep the Everest Mentor Flex where you need it: in your hands. Because less downtime means more uptime. HIGH DYNAMIC RANGE Optimize image quality in scenes with shiny surfaces

NOISE REDUCTION Intelligently analyzes live video to reduce visible noise



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#### DARK BOOST

and the

Assesses the content of scenes and intelligently adjusts levels to digitally brighten darker areas

COLOR SATURATION Provides high-quality images with vivid hues

DISTORTION CORRECTION Enables wide field-of-view optics without the distortions

> TIP OPTICS Variety of optical tip adapters to optimize based on depth of field and direction of view

LIGHT OUTPUT Best-in-class white light LED

CAMERA RESOLUTION 440k-pixel image resolution

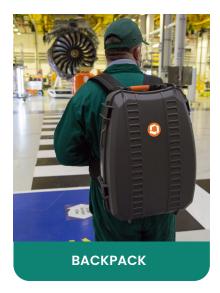
# Prepare for a more predictable future.

Powered by InspectionWorks and dual-band Wi-Fi to make inspections consistent and efficient, the Everest Mentor Flex VideoProbe<sup>™</sup> provides a built in hotspot to support wireless file transfers, video streaming, and remote control to iOS and Android devices, resulting in improved efficiency and flexibility on the job. And no matter what the future holds, easy wireless upgrades and planned software releases guarantee you'll be equipped for what's in store.

## Get the most out of your inspection.

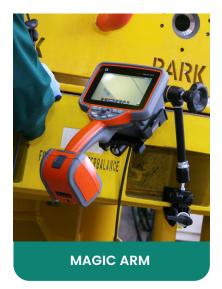
With these add-ons, you can maximize versatility and productivity while minimizing total cost of ownership for your Everest Mentor Flex device.

No matter the application, the Everest Mentor Flex can accommodate a wide variety of cases, including hands-free use, improving ergonomics and making everything that much simpler.













## The NDT software platform of the future.

InspectionWorks is an agnostic software platform that combines data from multiple non-destructive testing (NDT) tools, connects the entire inspection history of your asset and enables you to add inspection insights to a digital twin throughout its lifecycle. This turns your data into useful intelligence for faster and better decisions, ultimately saving costs and enabling a more competitive product.

#### InspectionWorks Connect Local+Control:

• Live stream video and control the Mentor Flex from iOS or Android devices.

#### InspectionWorks Insight

- Comprehensive data management and inspection history
- Cloud access to data and analytics

#### **Technical specifications: Handset**

Operating Temperature	
Тір	-25°C to 100°C (-13°F to 212°F). Reduced articulation below 0°C (32°F)
System	-25° to 46°C (-13°F to 115°F). LCD may require warm-up period below 0°C (32°F).
Storage Temperature	-25° to 60°C (-13°F to 140°F)
Relative Humidity	95% max, non-condensing
Waterproof	Insertion tube and tip to 14.7 psi (1 bar, 10.2 m of H2O, 33.5 ft of H2O)
Camera	
Diameter Probe	3.9 mm (0.15"), 4.0 mm (0.16"), 6.1 mm (0.24"), 8.4 mm (0.33")
Image Sensor	1/6" Color SUPER HAD™ CCD camera (6.1 mm, 8.4 mm) 1/10" (3.9mm, 4.0 mm)
Pixel Count	440,000 pixels
Housing	Titanium
System	
System Dimensions	13.7 cm x 19.7 cm x 38.1 cm (5.4" x 7.2" x 15")
Case Dimensions	Small case 35.0 x 54.5 x 23.0 cm (13.78" × 21.46" × 9.05") Backpack case 54.2 x 40.2 x 22.0 cm (21.3 x 15.8 x 8.6")
System Weight	In small case with contents: 10.2 kg (22.4 lbs) Out of Case: system – 2.50 kg (5.5 lbs) In backpack case with contents: 7.28 kg (16.05 lbs)
Construction	Magnesium and polycarbonate housing with integrated elastomeric bumpers
LCD Monitor	Integrated (5.8") transmissive color TFT WXGA Advanced Wide View (AWV) LCD, daylight readable display with optically bonded, multipoint capacitive Gorilla® Glass touchscreen
Joystick Control	360° All-Way® tip articulation, menu access, and navigation
Button Set	Access user functions, measurement, and digital functions
Internal Memory	32 GB
Data I/O Ports	Two USB 2.0 host "A" ports

Video Out	HDMI	
Brightness Control	Auto and Variable	
Illumination Type	White LED	
Long Exposure	Auto – up to 16 seconds	
White Balance	Factory default or user defined	
Wi-Fi Adapter	802.11a/b/g/n, 2x2 A WLAN	
Modulations	DSSS, OFDM	

Power Supply	
Lithium Ion Battery	3-hour runtime, 10.8 V (nominal), 73Wh, 6.8Ah
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Current	
AC	100-240 VAC, 50-60 Hz, <1.5 A RMS
DC	18 V, 3.34 A

Standards Compliance and Classifications			
MIL-STD-810H	United States Department of Defense Environment Tests Sections 501.7, 502.7, 506.6, 507.6, 509.7, 510.7, 511.7, 514.8, 516.8, 521.4		
MIL-STD-461G	U.S. Department of Defense — Electromagnetic Interference RS103, RE102 - ABOVE DECK		
Standards Compliance	Group 1, Class A: EN61326-1, UL, IEC, EN CSA-C22.2:61010-1, UN/DOT T1-T8		
IP Rating	IP65		

Software				
Operating System	Embedded, multi-tasking operating system			
User Interface	Menu-driven and soft button operation; menu navigation using either touch screen or joystick			
File Manager	Embedded file manager supports the following operation on files and folders: copy, paste, create, and delete. USB and internal flash storage			
Image Control	Brightness, invert, inverse+, distortion correction, noise reduction, HDR, dark boost, color saturation, illumination, long exposure, exposure lock, single view, zoom (5x digital), image capture and recall			
Digital Zoom	Continuous (5x)			
Image Formats	JPEG (.JPG)			
Video Format	MPEG4 AVC /H.264 (.MP4)			
Video Recording	Frame rate: 60 fps			
Text Annotation	Built-in full-screen text overlay generator			
Graphic Annotation	User placement of arrows			
Articulation Control	User-selectable steer vs. Steer-and-stay articulation; tip "Home" return to neutral forward-tip orientation			
Software Updates	Wireless over the air or field upgradeable via USB thumb drive			
InspectionWorks Connect Local	Wired or wireless file transfer and video streaming to iPad or iPhone			
Languages	English, Arabic, Chinese, Czech, Dutch, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Spanish, Swedish, Turkish, Taiwanese			
Application Software	Menu Directed Inspection (MDI) software digitally guides inspectors through the inspection process, intelligently names files and creates MS Word® and PDF compatible inspection reports. Inspection Manager software enables viewing, annotation, and re-measurement of images on a PC.			

## **Technical specifications: Probes and tips**

Probe Measurements			
Diameter	Length		
3.9 mm (0.15") or 4.0 mm (0.16")	2.0, 3.0 m (6.6, 9.8 ft.)		
6.1 mm (0.24") 2.0, 3.0, 3.5, 4.5, 6.0, 8.0 m (6.6, 9.8, 11.5, 14.8, 19.7, 26.2 ft.)			
8.4 mm (0.33") 2.0, 3.0, 4.5, 6.0, 8.0, 10.0 m (6.6, 9.8, 14.8, 19.7, 26.2, 32.8 ft.)			
Longer lengths up to 30m are available. Contact your sales representative for details.			

 Tip Articulation

 Insertion Tube Length
 Articulation

 2 m - 4.5 m
 Up/Down 160° min, Left/Right 160° min

 6 m - 10 m
 Up/Down 140° min, Left/Right 140° min

 Note: Typical articulation exceeds minimum specifications.

## **Tips specifications**

3.9 mm Tips					
Part No.	Color	FOV (deg)	DOF (mm)	DOF (in)	
Forward View					
PXT480FG*	None	80	6-80	.24-3.15	
PXT490FN	Orange	90	3-40	.12-1.57	
Side View					
PXT480SG*	Brown	80	4-80	.16-3.15	
PXT490SN	Red	90	2-16	.0863	
Stereo Measurement					
PXTM45050FG*	Black	50/50-FWD	5-45	.20-1.77	
PXTM45050SG*	Blue	50/50-SIDE	4-45	.16-1.77	

4.0 mm Tips					
Part No.	Color	FOV (deg)	DOF (mm)	DOF (in)	
Forward View					
T4080FF*	None	80	35-inf	1.38-inf	
T40115FN	Black	115	4-inf	.16-inf	
Side View					
T40115SN	Red	115	1-30	.04-1.18	
T40120SF	Blue	120	6-inf	.24 - inf	
Stereo Measurement					
TM405555FG	Black	55/55-FWD	5-inf	.20-inf	
TM405555SG	Blue	55/55-SIDE	4-inf	.16-inf	

6.1 mm Tips				
Part No.	Color	FOV (deg)	DOF (mm)	DOF (in)

Forward View				
T6150FF	None	50	50-inf	2.36-inf
XLG3T6150FG	White	50	12-200	.47-7.87
XLG3T61120FG	Black	120	5-120	.20-4.72
T61120FF	Gray	120	20-inf	.79-inf
XLG3T6180FN	Orange	80	3-20	.1279
XLG3T6190FF	Yellow	90	20-inf	.79-inf
XLG3T6150FB	Purple	50 (45 DOV)	12-80	.47-3.15
T6165FF*	Orange/Blue	65	65-inf	2.56-inf
Side View				
XLG3T6150SF	Brown	50	45-inf	1.77-inf
XLG3T6150SG	Green	50	6-160	.35-6.30
XLG3T61120SG	Blue	120	4-100	.16-3.94
XLG3T6180SN	Red	80	1-20	.0479
Stereo Measurement				
XLG3TM616060FG	Black	60/60-FWD	4-80	.16-3.15
XLG3TM615050SG	Blue	50/50-SIDE	2-50	.08-1.97
8.4 mm Tips				
Part No.	Color	FOV (deg)	DOF (mm)	DOF (in)
Forward View				
XLG3T8440FF*	None	40	250-inf	9.84-inf
XLG3T8480FG	Yellow	80	25-500	.98-19.70
XLG3T84120FN	Black	120	5-200	.20-7.87
T84120FF	Orange/Blue	120	20-inf	.79-inf
XLG3T8440FG	White	40	80-500	3.15-19.70
Side View				
XLG3T8440SF*	Brown	40	240-inf	9.84-inf
XLG3T8480SG	Green	80	25-500	.98-19.70
XLG3T84120SN	Blue	120	4-200	.16-7.87
Stereo Measurement				
	Black	60/60-FWD	4-50	.16-1.97
XLG3TM846060FG	DIUCK	00/00 1 100	4 50	.10 1.07

\*Indicates tip with maximum brightness

# The answer is simple.

When time is critical and inspections need to be precise, your choice in borescope matters. But when the price-competitive Everest Mentor Flex delivers the same level of confidence you've come to expect from Waygate Technologies — all while future-proofing your inspections — the answer is simple.

See how Waygate Technologies is revolutionizing the digital inspection landscape. Contact your sales representative for a demonstration.

waygate-tech.com/everestmentorflex



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