



# yateks wa

Yateks Realta 3D Industrial Video Borescope









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#### Introduction:



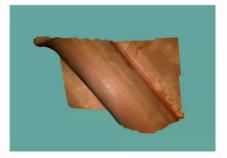
The Realta 3D videoborescope features a 7" IPS HD LCD screen with a resolution of up to 1920 \* 1200, offering dual functionality with touch and button controls for fast and easy operation. It incorporates Yateks' patented technology and utilizes self-developed graphic processor technology, enhancing image and video response speed and resulting in a more precise and detailed presentation of images.

The probe allows for 360° omnidirectional rotation and is equipped with overload protection and automatic locking and resetting capabilities, enabling long-distance image transmission for deeper channel detection. The instrument consists of four components: the camera module, insertion tube, host, and operating handle. This innovative, non-destructive flaw detection instrument integrates optics, precision machinery, electro-mechanics, electronic technology, and microscopic camera technology, commonly used to detect internal surface defects that the naked eye cannot see.







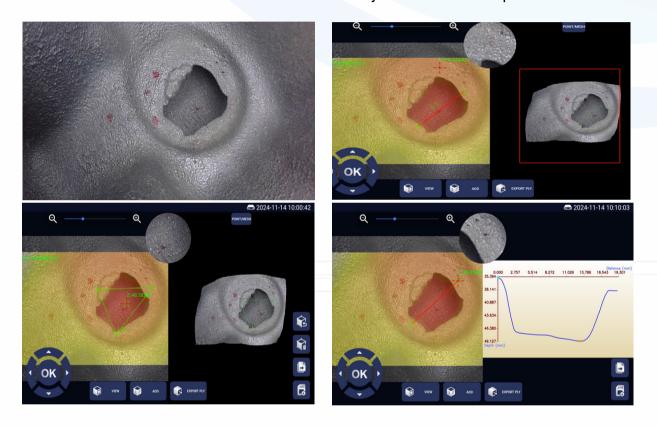






#### Advanced Measurement Technology

**Accurate 3D Measurement Function**: with the measurement function, it can generate a 3D point cloud map, depth map, profile, etc., to reproduce the outer contour of the object that's to be measured, among which the three-dimensional point cloud map is scalable, rotated, etc., real-time verification of the accuracy of the selected points, to avoid the inaccurate measurement results caused by the selection of points error.



**Dual Megapixel High Sensitivity Industrial Camera**: This can be equipped with dual megapixel HD lenses with advanced image sensors and optical systems, which can present clear, detailed images that help to accurately observe and analyze the interior of the object being inspected.



#### Technical Advantages



**Modular Design for Quick Assembling** – an ergonomically designed handle that's easy to hold and operate with one hand; large-capacity removable rechargeable battery pack; the handle can be paired with multiple options.



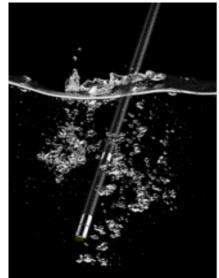
**Easy and Intuitive Operation** – an intelligent operating system with a simple interface. Support menu-driven and critical operation, easy to set and operate various functions, such as image shooting, storage, playback, and probe control. Yateks patented technology, step, fast and slow speed adjustment, and fine-tuning locking function as well as motorized 360° steering control, maximum unidirectional 220°







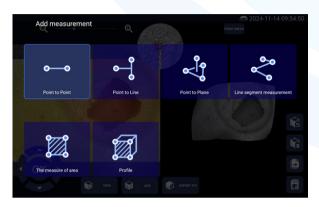
**Robust and Durable** – the host has a rugged shell and structure, the probe is IP67 rated waterproof, and uses special materials and processes with good abrasion resistance and corrosion resistance.



#### Technical Advantages

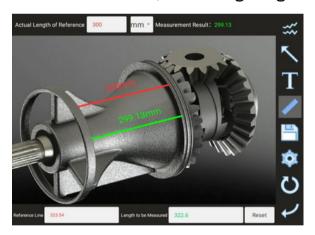


**Good connectivity and expandability** - equipped with a variety of interfaces, such as USB-A, USB-C, HDMI, etc., convenient to connect with external devices and data transmission, support WLAN and Bluetooth function, easy to communicate with other devices wirelessly, and data sharing to achieve remote operation and collaboration and improve work efficiency..





**Powerful File Processing Capabilities** allow for zooming in and out, restoring, deleting, adding graffiti, comparing measurements, and performing other operations on images. Photos and videos can be added with text annotations, facilitating the generation of later reports.



**Powerful Storage Function** – The host comes with 128GB internal storage + 64GB USB disk; storage space can meet the demand for storing more photos and videos and smoother equipment operation.

## Specifications



	Category	De	scription		
	Product Dimension	364mm*198.5mm*132.5mm			
System	Weight	<2kg (2m)			
	Display screen	7"IPS ,1920*1080(16: 9), Industrial HD touch LCD screen			
	Main function	Photo, video, light source brightness adjustment, screen brightness adjustment, zo in and out, screen flip, color inversion, screen freeze, color mode adjustment, asperatio, grid measurement, automatic white balance, image browsing, lock fine-tunimenu			
	Joystick control	Motor rocker for 360° rotation			
	Steering control	automatic set, direction fine tuning adjustable			
	Memory	Built-in 128G + expansion 64G USB flash drive (up to 256G expansion)			
	Data I/O port	Two USB2.0 host A ports, Type-C ports, and headset ports			
	Video output	Mini HDMI interface, WIFI interface			
	Battery	Removable, independently rechargeable battery pack			
	Battery	≥4h			
	Operating mode	The host and the probe can be separated, and one host can be equipped with more than one probe.			
	Operating system	Multi-task intelligent operating system,	menu driven and key operation		
	UI	Touch screen operation menu			
	File management	Supports image/video playback, deletion, formatting, and renaming			
	Image control	Zoom and playback			
	Negative film function	Dynamic negative			
	Digital Zoom	1-100 times			
	Image control	Screen freeze, image flip			
	Picture format	JPG、PNG(Record the date and time)			
Cottune	Video format	AVI、MP4(Record the date and time)			
Software	Language	Simplified Chinese, English, French, Spanish, Russian, Japanese, Korean, Traditional Chinese, German, Portuguese			
	Color Settings	Near, medium, Far, custom color modes			
	White balance	Automatic white balance, manual white	balance		
	3D dimensional measurement	Measuring error	≤5%		
		Measurement accuracy	±0.05mm		
	Text annotation	It has the function of adding text annotation, which can be annotated at any time according to the detection situation, so as to facilitate the generation of later repor			
	Software upgrade	Upgrade by using the upgrade package in the USB flash drive			
	Diameter	0.85mm\1.1mm\1.7mm\2.2mm\2.8mm\4mm\6mm\8.4mm			
	Camera Pixels	160000 Pixel ~2 million pixel			
Insertion tube Parameters	Insertion tube length	1~10m			
	Insertion tube material	Tungsten alloy steel wire braided 4-layer tube			
	Camera articulation	360° electric arbitrary direction			
Operating environment	Monitor working temperature	-10~50℃			
	Probe working temperature	-20~70°C			
	Relative humidity	Up to 90%, no condensation			
	Waterproof	Host IP54/Probe IP67			

### Models for Realta series:



#### **PROBE VERSIONS**

Diameter	Working length				
Diameter	1m	1.5m	2m	3m	
4mm	•	•	•	•	
6mm	•	•	•	•	

Focal range					Light source
Diameter	FN	SN	FM	SM	w
	DOF(mm)	DOF(mm)	DOF(mm)	DOF(mm)	White light
4mm	3-50	4-80		8-100	yes
6mm	4-80	4-80	8-150	8-100	yes
FN Fo	orward Near SN Side N	lear FM Forward Mi	d SM Side Mid		Distal LEDs or Fiber optic



