

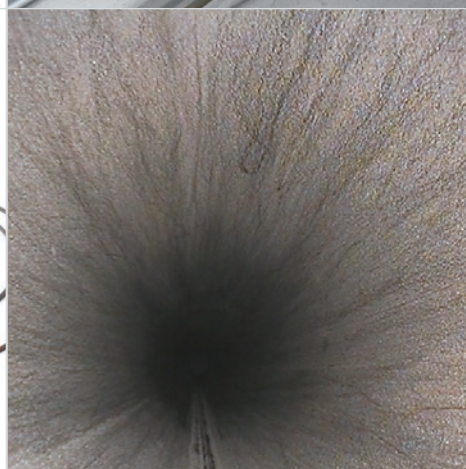
# OLYMPUS®

Your Vision, Our Future

Industrial Videoscope

## IPLEX Long Scope Solution

# *IPLEX*





# IPLEX Long Scopes ensure efficient and accurate long pipe inspections

As a world-renowned manufacturer of industrial endoscopes with a vast experience in providing innovative inspection solutions, Olympus offers various videoscopes for long pipe inspections.



## Inspection Examples

### Objects

Heat exchangers, boilers, reactors, tanks, pressure vessels, process piping

### Inspections

Corrosion, erosion, scaling, clogging, residues, cracks, welding conditions



Welded Pipe



Weld of a Heat Exchanger Tube



Corroded Pipe



Corroded Pipe



Stainless Steel Ball Valve

## Benefits of IPLEX Long Scopes

- Wide Range of Long Scopes available up to 30 m long to cover diverse applications
- Bright and high quality images revealing small defects in deep, dark areas
- Specially-processed insertion tubes achieving excellent durability and maneuverability
- Portable design suitable for field inspections
- Rain, dust, and physical shock-proof systems to provide reliable inspections even in harsh environments\*
- Stereo Measurement capability increasing inspection reliability

\*Excluding IPLEX YS



Portable Design (IPLEX RX)

# Product Lineup for IPLEX Long Scopes

## IPLEX FX

This high-end industrial videoscope system combines portability with advanced functionality, and ease of use with durability. The interchangeable scopes cover various inspection applications with a single IPLEX.



## IPLEX RX/IPLEX RT

Featuring unsurpassed image quality yet user-friendly, and boasting a portable design. Ideal for inspectors who require uncompromised and precise inspections.



## IPLEX LX/IPLEX LT

The 8.5 mm outer diameter scope is suitable for large space inspections, featuring excellent brightness and scope insertion capability.



## IPLEX YS

The extra-long 30 m scope is equipped with various innovative technologies, being optimized for extra-long pipe inspections.



# IPLEX Long Scope Comparison Chart

## COMPARISON OF MAIN SPECIFICATIONS

IPLEX FX					IPLEX RX / RT				IPLEX LX / LT				IPLEX YS	
Dimensions of main/base unit <sup>*1</sup> (W×D×H)	216 × 126 × 249 mm (8.5 × 5.0 × 9.8 in.)				227 × 64 × 189 mm (8.9 × 2.5 × 7.4 in.)				227 × 64 × 189 mm (8.9 × 2.5 × 7.4 in.)				472 × 380 × 522 mm (18.6 × 15 × 20.5 in.)	
Model No.	IV8650	IV8675	IV86120 <sup>*2</sup>	IV86180 <sup>*2</sup>	IV9650RX	IV9650RT	IV9675RX	IV9675RT	IV88100L1	IV88100L2	IV88200L1 <sup>*2</sup>	IV88200L2 <sup>*2</sup>	IV88300Y <sup>*2</sup>	
Approx. system weight	6.9 kg <sup>-3</sup> (15.2 lb)	7.1 kg <sup>-3</sup> (15.7 lb)	7.5 kg <sup>-3</sup> (17.2 lb)	8.0 kg <sup>-3</sup> (17.6 lb)	3.3 kg <sup>-3</sup> (7.3 lb)	3.3 kg <sup>-3</sup> (7.3 lb)	3.5 kg <sup>-3</sup> (7.7 lb)	3.5 kg <sup>-3</sup> (7.7 lb)	3.9 kg <sup>-3</sup> (9.0 lb)	3.9 kg <sup>-3</sup> (9.0 lb)	5.2 kg <sup>-3</sup> (11.5 lb)	5.2 kg <sup>-3</sup> (11.5 lb)	26.0 kg (57.3 lb)	
Outer diameter	6 mm (0.236 in.)				6 mm (0.236 in.)				8.5 mm (0.334 in.)				8.5 mm (0.334 in.)	
Scope length														
	5 m (16.4 ft)	7.5 m (26.4 ft)	12 m (39.4 ft)	18 m (59.1 ft)	5 m (16.4 ft)	5 m (16.4 ft)	7.5 m (26.4 ft)	7.5 m (26.4 ft)	10 m (32.8 ft)	10 m (32.8 ft)	20 m (65.6 ft)	20 m (65.6 ft)	30 m (98.4 ft)	
Brightness comparison <sup>*4</sup> / Appropriate observation area	Normal mode													
	Small area	Small area	Small area	Small area	Middle-Large area	Middle-Large area	Middle-Large area	Middle-Large area	Middle-Large area	Middle-Large area	Middle-Large area	Middle-Large area	Middle-Large area	
	Hi-Beam mode													
					—	—	—	—		—		—	—	
	Middle area	Middle area	Middle area	Middle area					Large area		Large area			
Articulation angle (UP/ DOWN/ RIGHT/ LEFT)	110°	90°	70°	50°	120°	120°	100°	100°	115°	115°	70°	70°	60°	
Scope insertion performance	—	—	—	—	—	—	—	—	The stiffer insertion tube can reach 3x deeper areas. <sup>*4</sup>					
Operating temperatures of Insertion tube	-25 to 100 °C (-13 °F to 212 °F)				-25 to 100 °C (-13 to 212 °F)	-25 to 80 °C (-13 to 176 °F)	-25 to 100 °C (-13 to 212 °F)	-25 to 80 °C (-13 to 176 °F)	-25 to 80 °C (-13 to 176 °F)				-25 to 100 °C (-13 to 212 °F)	
Insertion tube durability	Abrasion/Crush-proof insertion tube													
Waterproof performance of Insertion tube	Water-proof													

<sup>\*1</sup> Excluding protrusions <sup>\*2</sup> Built-to-order <sup>\*3</sup> With battery <sup>\*4</sup> Internal comparison test with a φ6 mm videoscope

# IPLEX Long Scope Comparison Chart

## FUNCTIONAL COMPARISON

Category	Function		IPLEX FX	IPLEX RX	IPLEX RT	IPLEX LX	IPLEX LT	IPLEX YS
Operability	Scope tip articulation	Articulation mechanics	TrueFeel™ electronic power-assisted system					Pneumatic pressure
	6.5 in. daylight-view LCD monitor	Low-reflection display, the daylight-view monitor reproduces clear, vivid images even under the brightest sunlight.	■	■	■	■	■	■
	Battery operation	Approx. operating time per battery	150 minutes	120 minutes	120 minutes	100 minutes	100 minutes	120 minutes
	Interchangeable optical adaptor	A comprehensive range of optical adaptors for optimal magnification and direction is available.	■	■	■	■	■	■
	Interchangeable scope unit	Scopes of different lengths are available with one base unit by changing the scope units.	■					
Recording management	Still image recording	Recording format	JPEG/TIFF	JPEG	JPEG	JPEG	JPEG	JPEG/TIFF
	Movie recording	Recording format	AVI M-JPEG	AVI MPEG4	AVI MPEG4	AVI MPEG4	AVI MPEG4	AVI M-JPEG
	Audio recording	WAV (Max. 60 sec.)	■					■
	Image title entry	IPLEX FX/ YS - In addition to 30-character title, up to 10 descriptions can be put into images. IPLEX RX/ RT/ LX/ LT - Up to 30 characters	■	■	■	■	■	■
	Thumbnail image display	Recorded images can be displayed as thumbnails.	■	■	■	■	■	■
	USB terminal		■	■	■	■	■	■
Brightness/ Image quality	High-intensity illumination	Illumination type	LED	LED	LED	LED	LED	Laser diode
	Hi-Beam mode	Boosts illumination up to 2x.	■			■		
	Long time exposure	Provides extra-bright images.	■	■	■			■
	WiDER™ (Wide Dynamic Extended Range)	The unique image processing capability which brings out detail in shadowed and highlighted areas to produce bright, contrast-balanced images across the entire depth of field.	■	■		■		■
	Color adjustment	3 step adjustable control of color saturation		■				
	Sharpness adjustment	4 step adjustable sharpness control		■				
Advanced functionality	Basic stereo measurement	Distance, Point-to-Line, Depth, Area, Lines	■	■ <sup>*1</sup>		■ <sup>*1</sup>		■
	Advanced stereo measurement	Multi, Offset, Profile	■					■
	Image comparison	Available to observe secular change.	■					■
	Internal Memory	1GB	■					■
	Air Articulation	Enables to unroll only the length which is needed for the inspection and manipulate scope articulation with the compact palmheld controller.						■
	Gravity sensor	Indicates gravity directions of the scope tip.						■
	Inserted scope length detection <sup>*2</sup>	Displays the scope length inserted into an object on the screen.						■
	Lens cleaning function	Removes fine drip and dust on the scope tip by blowing air.						■
Environment resistance	Physical shock-proof	Passed the drop test from heights of 1.2 m.	■ <sup>*3</sup>	■ <sup>*3</sup>	■ <sup>*3</sup>	■ <sup>*3</sup>	■ <sup>*3</sup>	
	Drip-proof/ Dust-proof	Available to be used in rain, sand, and dust.	■ <sup>*4</sup>	■ <sup>*4</sup>	■ <sup>*4</sup>	■ <sup>*4</sup>	■ <sup>*4</sup>	
	Temperature sensor	Equipped on the scope tips to provide high temperature warning.	■	■		■		■

<sup>\*1</sup> System upgrade is required to activate the stereo measurement function.

<sup>\*2</sup> The optional length indicator is required.

<sup>\*3</sup> Excluding the LCD monitor of the IPLEX FX. Complies with MIL-STD 810G ( United States Defense Standards), Method 516.5.

<sup>\*4</sup> Complies with IP55 (A degree of protection defined by the International Electrotechnical Commission [IEC], which indicates the ability of a device to withstand the ingress of dust or water.)



The IPLEX YS industrial videoscope is equipped with laser illumination.

OLYMPUS CORPORATION is ISO 9001 and ISO 14001 certified

<sup>\*All specifications are subject to change without notice.</sup>

This product is designed for use in industrial environments for the EMC performance. Using it in a residential environment may affect other equipment in the environment.  
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