

# OLYMPUS®

Your Vision, Our Future

Industrial Videoscope

## IPLEX TX

# *IPLEX*

## 2.4 mm Diameter Articulating Scope for Very Narrow Spaces

**NEW**



# IPLEX TX

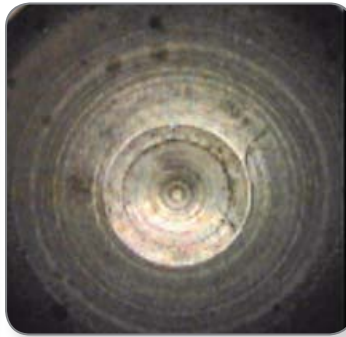
## Articulating 2.4 mm diameter videoscope provides superb image quality and durability

The IPLEX TX enables you to make inspections inside parts where access is limited due to very narrow openings. Combining its clear images and outstanding durability, the IPLEX TX is the ideal videoscope for routine inspection of castings, molds, and other parts with small cavities.

Ultra-thin



Excellent image



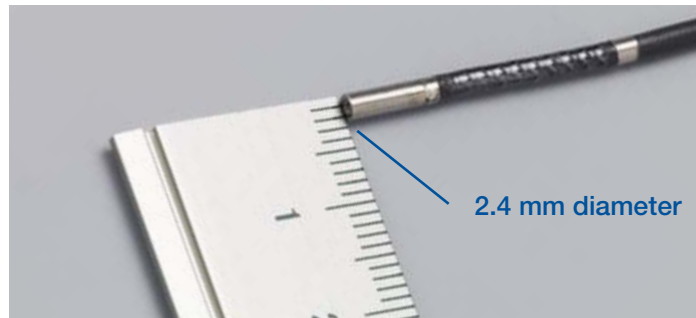
Tough



## The world's smallest diameter videoscope with articulation\*

### Ultra-thin, 2.4 mm diameter

At just 2.4 mm diameter, the flexible insertion tube reaches inside almost any narrow or difficult-to-reach area that requires visual inspection of defects. The IPLEX TX ensures uncompromised inspections.



### Quick and accurate articulation

The IPLEX TX is a videoscope with the world's smallest diameter\* insertion tube and is equipped with an ergonomic, user-friendly scope articulation controller. The controller features excellent responsiveness and quickly and accurately navigates the scope tip inside narrow and intricate objects.

\*As of July 2, 2012



## Tough design optimal for frequent use

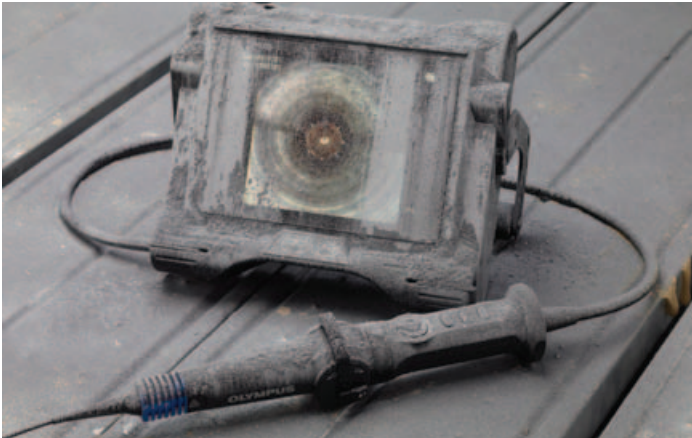
### Unsurpassed abrasion resistance

The IPLEX TX boasts a special resin tube featuring 200 times greater abrasion resistance than our conventional extra-thin fiberscopes. The durable insertion tube enables reliable inspection of casting and other metals that have rough surfaces.



## Ensured dust resistance

The IPLEX TX is both dust-proof and drip-proof, and is designed for compliance with IP55. This durable unit can perform reliable inspections even in harsh manufacturing environments.



## Interchangeable scope system

The IPLEX TX has an insertion tube that can be easily interchanged in the field.



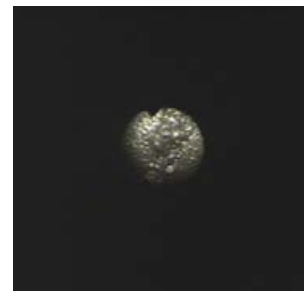
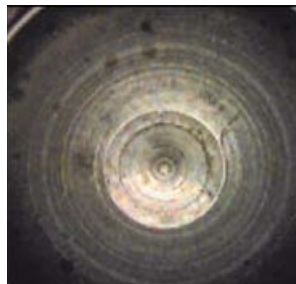
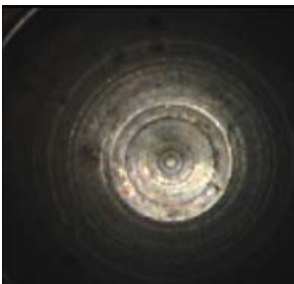
## Great advance in image quality

### Exceptionally bright and clear images

Compared to other very small-diameter videoscopes, the IPLEX TX delivers superior image quality. The videoscope's vivid and clear images increase the detection of abnormalities and ensure improved and efficient inspections.

### Precise image reproduction without halation

The unique image processing capability WiDER™ reduces the halation effects that often occurs during inspection of metal objects. WiDER brings out details in shadow areas and produces much clearer, crisper images.



Monitor image via a conventional fiberscope



Monitor image on IPLEX TX

### Large monitor, small body

The IPLEX TX is equipped with a 6.5 in. LCD monitor to clearly display tiny defects such as burrs and scratches.

The compact and portable body with an integrated Lithium-ion battery allows you to make inspections at any sites.



## Efficient image management

### High-quality images and movies

Observed images can be recorded onto a removable USB flash drive as high-quality JPEG still images and MPEG-4 movies. The provided 1 GB USB flash drive can store approximately 3,400 still images or 30 minutes of movies.



### Title input function

For efficient image diagnosis and report generation, the IPLEX TX enables you to insert titles as well as date and time overlay.



# IPLEX TX Specifications\*

## Scope Unit

Model No.		IV8212T
Approximate weight		0.2 kg (0.44 lb)
Insertion tube	Scope diameter <sup>*1</sup>	ø2.4 mm (0.094 in.)
	Scope length	1.2 m (3.9 ft)
	Distal end <sup>*2</sup>	9.8 mm (0.386 in.)
	Exterior	High durability resin tube with special processing
	Tube flexibility	Uniformed stiffness
Optics	Direction of view	Forward
	Field of view	80°
	Depth of field <sup>*3</sup>	3 mm to 70 mm (0.12 in. to 2.75 in.)
	Illumination	High-intensity white LED
Articulation section	Articulation angle	135° (Up/Down)
	Articulation mechanics	Direct manipulation

\*1. The insertion tube can be inserted into a 2.4 mm (0.094 in.) hole.

\*2. Indicates the length of the rigid portion at the scope's distal end.

\*3. Indicates the optimal focal distance.

## Main Unit

Model No.		IV8200T
Approximate weight		1.7 kg (3.75 lb) (with battery or AC power adapter)
Dimensions (W x D x H)		227 mm x 64 mm x 189 mm (8.9 in. x 2.5 in. x 7.4); Max. dimensions 239 mm x 99 mm x 215 mm (9.4 in. x 3.9 in. 8.4 in.)
Handheld controller	Controllable functions	Live mode, WIDER™ Gain control, Brightness, Zoom, Freeze image, Record still/video, Articulation control, Articulation lock, Menu access, Saved recording index access, Quick last image recall.
	Approximate weight	0.3 kg (0.66 lb)
	Dimensions (W x D x L)	49 mm x 59 mm x 334 mm (1.9 in. x 2.3 in. x 13.2 in.)
LCD monitor		6.5 in. daylight-view LCD, anti-reflective type
Power supply		Battery: 10.8 V nominal AC power: 100 V to 240 V, 50/60 Hz (with supplied AC adapter)
Output connector		RCA composite video output
USB connector		Type A connector, Version 2.0 standards
Software manipulations	Image manipulations	Seamless digital zoom from 0.5x to 2x, 8-step digital brightness control
	Adjustable gain control	3-step adjustable gain control with exclusive WIDER™ brightness level balancing technology
	Display text options	30-character title display
Recording management functions	Recording media	USB flash memory (1 GB standard, compatible with recommended USB flash device)
	Overlay	Selectable 30 character title with date, time and system setting
	Thumbnail image display	Recorded images can be displayed as thumbnails.
	Still image recording	Resolution – NTSC: H640 x V480 (Pixel), PAL: H768 x V576 (Pixel)
		Recording format – Compressed JPEG format
		Size of a single image – Approximately 300 KB (approximately 3,400 images per 1 GB memory)
	Video recording	Resolution – H640 x V480 (Pixel)
		Recording format – AVI MPEG-4 format. Can be played on the Windows Media Player.  Size of a single image – Approximately 500 KB per second (approximately 30 min. per 1 GB memory)

## Operating Environment

Operating temperature	Insertion tube	In air: -25 °C to 80 °C (-13 °F to 176 °F) In water: 10 °C to 30 °C (50 °F to 86 °F)
	Other parts	In air: -10 °C to 40 °C (14 °F to 104 °F) (with battery) 0 to 40 °C (32 °F to 104 °F) (with AC power adapter)
Operating atmospheric pressure	Insertion tube	In air: 1013 hPa In water: 1013 to 1135 hPa
	Other parts	In air: 1013 hPa
Relative humidity	All parts	15% to 90%
Liquid resistance	All parts	Operable when exposed to machine oil, light oil or 5% saline solution.
Waterproofing	Insertion tube	Operable under water.
	Other parts	Operable in blowing rain conditions (battery compartment must be closed). Not operable under water.

## Accessories

### Lithium-ion Battery NC2040OL24

**Battery Charger  
CH5000C** (USA type)  
**CH5000X** (European type) The battery provides 150 minutes of operating time.



**LCD Protection Sheet**  
Protects the IPLEX TX monitor from scratches and dirt.



**Shoulder Belt**  
Enables you to operate the IPLEX TX while worn.



**Protective Braid**  
Covers the IPLEX TX insertion tube providing additional protection when used in very coarse environments.



OLYMPUS NDT INC. is ISO 9001 and 14001 certified.

**OLYMPUS**

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