

Remote Visual Inspection Solutions



The IPLEX NX and IPLEX YS videoscopes are equipped with laser light sources.

- OLYMPUS CORPORATION is ISO14001 certified.
- OLYMPUS CORPORATION is ISO9001 certified.
- The EMC performance of these products is designed for use in industrial environments. Using them in a residential environment may affect other equipment in the environment.
- All company and product names are registered trademarks and/or trademarks of their respective owners.
- Images on the PC monitors are simulated.
- Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.

- Videoscopes
- Fiberscopes
- Rigid Borescopes
- Miniboscopes
- Light Sources
- Accessories

# Satisfying the Remote Visual Inspection Demands of Diverse Industries

Olympus is a world-renowned leader in remote visual inspection (RVI) technology with a comprehensive portfolio of industrial videoscopes, fiberscopes, and borescopes that facilitate accurate inspections of small, enclosed spaces. Our RVI solutions are used in a wide range of industries and applications.

## Applications

Industries	Applications
<b>Aerospace</b>	<ul style="list-style-type: none"> <li>Turbine blades</li> <li>Combustion chamber</li> <li>Landing gear</li> <li>Airframe</li> </ul>
<b>Power Generation</b>	<ul style="list-style-type: none"> <li>Heat exchanger pipes</li> <li>Turbine blades</li> <li>Power plant equipment</li> <li>Wind gearboxes</li> </ul>
<b>Oil/ Gas/ Chemical Plants</b>	<ul style="list-style-type: none"> <li>Process pipes</li> <li>Heat exchanger pipes</li> <li>Boiler maintenance</li> <li>Tanks</li> </ul>
<b>Automotive</b>	<ul style="list-style-type: none"> <li>Engine parts</li> <li>Assembled units</li> <li>Cast parts</li> <li>R&amp;D, quality assurance</li> </ul>
<b>Defense/ Security</b>	<ul style="list-style-type: none"> <li>Aircraft maintenance</li> <li>Customs &amp; Border Control</li> <li>Search &amp; Rescue</li> <li>Police &amp; Special Forces</li> </ul>
<b>Architecture/ Construction</b>	<ul style="list-style-type: none"> <li>Water pipes</li> <li>Gas pipes</li> <li>Ceiling and flooring</li> <li>Elevator maintenance</li> </ul>
<b>Manufacturing</b>	<ul style="list-style-type: none"> <li>Small parts</li> <li>Drilled parts</li> <li>Production facilities</li> <li>R&amp;D, quality assurance</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>Bridge maintenance</li> <li>Tunnel maintenance</li> <li>Railroad maintenance</li> <li>Water (drain) pipe maintenance</li> </ul>



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<b>Fiberscopes</b> ..... P.9	<b>Light Sources</b> ..... P.11
<b>Rigid Borescopes</b> ..... P.9	<b>System Charts</b> ..... P.12 - 14
<b>Miniboscopes</b> ..... P.10	

# Diverse Selection of Solutions to Exceed Your Requirements

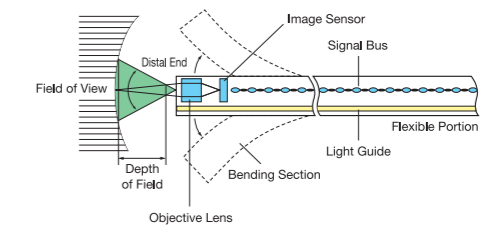
## Videoscopes

- All-in-one package
- Automatic brightness control
- Video and still image recording
- Stereo measurement (optional)

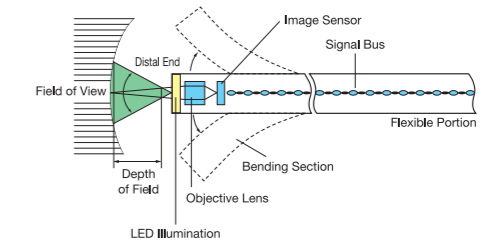


## Structural Diagrams

### ▶ IPLEX NX/ IPLEX GX/ IPLEX GT/ IPLEX YS/ IPLEX TX/ IPLEX G Lite Videoscopes



### ▶ IPLEX RX/ IPLEX RT Videoscope

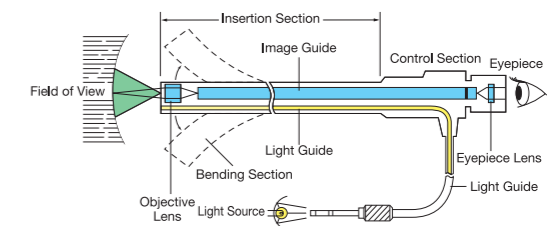


## Fiberscopes

- Minimum 0.64 mm (0.03 in.) diameter
- Selectable light sources
- Eye-piece and monitor-based inspection
- Cost-effective



### ▶ Fiberscopes

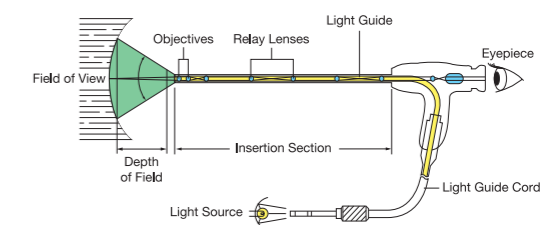


## Rigid Borescopes

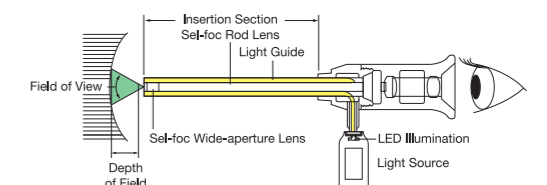
- High-quality lenses
- Eye-piece and monitor-based inspection
- Cost-effective



### ▶ Standard Rigid Borescopes/ Swing-Prism Borescopes/ Zoom Swing-Prism Borescopes/ Engine Borescopes



### ▶ MK Modular Mini-Scopes



## Advanced and Feature Packed

### IPLEX NX

Diameter: 4.0 mm/6.0 mm Lengths: 3.5 m to 7.5 m



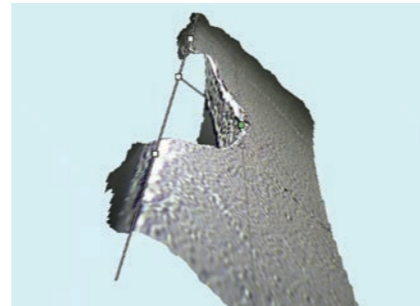
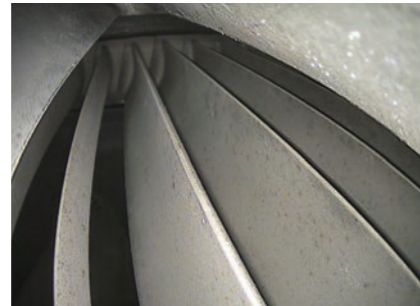
High-quality images and expanded measurement capabilities

#### Features

High-definition images on an 8.4-inch screen

Intensely bright laser diode illumination

Measure with confidence using 3D Modeling



## The Portable, Powerful Videoscope

### IPLEX G Lite

Diameter: 4.0 mm/6.0 mm Lengths: 2.0 m to 10.0 m



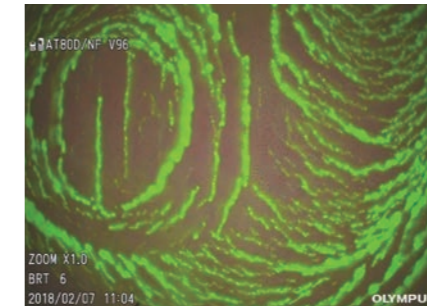
Small and tough enough to use almost anywhere

#### Features

Ergonomic and lightweight

Flexible UV and IR lighting options

Responsive joystick and precise articulation



## Versatile Visual Inspection

### IPLEX GX/GT

Diameter: 4.0 mm/6.0 mm Lengths: 2.0 m to 10.0 m



A good balance of portability, imaging capabilities, and ease of use

#### Features

Easy-to-use touch screen and hot key controls

Bright and clear images with smart video

Interchangeable scopes and light sources (white, UV, IR)



## Ultra-Thin Videoscope

### IPLEX TX

Diameter: 2.4 mm Length: 1.2 m



The video scope's ultra-thin diameter enables you to view inside very narrow spaces

#### Features

An ultra-thin videoscope with articulation

Interchangeable scope system



#### Options

##### Protective braid

Enhanced durability for IPLEX TX insertion tubes



Scopes up to 20 Meters (65.6 Feet) Long

## Long Scopes

Diameter: 6.0 mm/8.5 mm Lengths: 5.0 m to 20.0 m



Durable long insertion tubes with articulation for our portable videoscopes

### Features

- Various lengths, from 5.0 m to 20.0 m
- Simple user-interface
- Stereo measurement available (depending on the model; stereo tip adaptor required)

### Options

**Flexible guide tube\***  
(7.5 m and 10.0 m; 24.6 ft–32.8 ft)



Increases the insertion tube's rigidity

\*Only for IPLEX GX/GT/G Lite

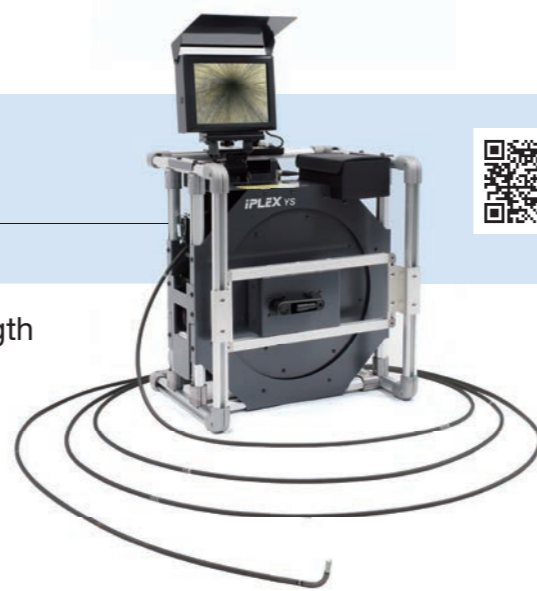
### Long Scopes General Specifications

	IPLEX NX	IPLEX GX/GT	IPLEX G Lite	IPLEX RX/RT
Scope diameter	6.0 mm (0.24 in.)	6.0 mm (0.24 in.)	6.0 mm (0.24 in.)	8.5 mm (0.33 in.)
Scope length	5.0 m / 7.5 m (16.4 ft. / 24.6 ft.)	7.5 m / 10.0 m (24.6 ft. / 32.8 ft.)	10.0 m (32.8 ft.)	20.0 m (65.6 ft.)
Monitor size	8.4 inch	8.0 inch	4.3 inch	6.5 inch
Interchangeable scope unit	✓	✓	—	—
Illumination	Laser diode	LED	LED	LED tip adaptor
Light source	White	White (standard) UV, IR (optional)	White (standard) UV, IR (optional)	White
Measurement	Stereo with 3D modeling Scalar	Stereo (optional, GX only) Scalar	Stereo (optional) Scalar	—

Extra-Long 30-Meter Videoscope

## IPLEX YS

Diameter 8.5 mm Length: 30.0 m



Air articulation offers unparalleled flexibility at any length

### Features

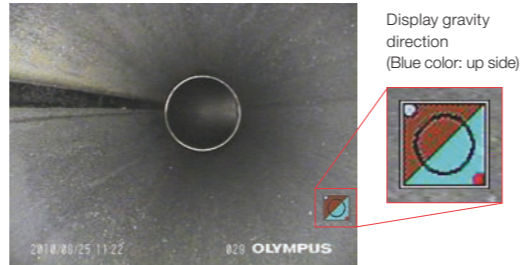
Air pressure articulation function



Air jet blows away dust on the scope tip



Gravity sensor helps reveal the target's orientation



## Optical Tip Adaptors for the IPLEX Series

### IPLEX NX

		4.0 mm Optical Tip Adaptors					4.0 mm Stereo Tip Adaptors	
		AT80D/FF-IV94N	AT120D/NF-IV94N	AT120D/FF-IV94N	AT100S/NF-IV94N	AT100S/FF-IV94N	AT70D/70D-IV94N	AT50S/50S-IV94N
Optical system	Field of view	80°	120°	120°	100°	100°	70°/70°	50°/50°
	Direction of view	Forward	Forward	Forward	Side	Side	Forward	Side
	Depth of field*1	35 to ∞ mm	2 to 200 mm	17 to ∞ mm	2 to 15 mm	8 to ∞ mm	5 to 200 mm	3 to 150 mm

		6.0 mm Optical Tip Adaptors					6.0 mm Stereo Tip Adaptors		
		AT50D/FF-IV96N	AT80D/FF-IV96N	AT120D/NF-IV96N	AT120D/FF-IV96N	AT120S/NF-IV96N	AT120S/FF-IV96N	AT90D/90D-IV96N	AT70S/70S-IV96N
Optical system	Field of view	50°	80°	120°	120°	120°	120°	90°/90°	70°/70°
	Direction of view	Forward	Forward	Forward	Forward	Side	Side	Forward	Side
	Depth of field*1	50 to ∞ mm	20 to ∞ mm	7 to 300 mm	19 to ∞ mm	4 to 150 mm	20 to ∞ mm	5 to 250 mm	4 to 250 mm

### IPLEX GX/GT, IPLEX G Lite

		4.0 mm Optical Tip Adaptors					4.0 mm Stereo Tip Adaptors		6.0 mm Stereo Tip Adaptors	
		AT80D/FF-IV94G	AT120D/NF-IV94G	AT120D/FF-IV94G	AT100S/NF-IV94G	AT100S/FF-IV94G	AT50D/50D-IV94	AT50S/50S-IV94	AT60D/60D-IV96	AT60S/60S-IV96
Optical system	Field of view	80°	120°	120°	100°	100°	50°/50°		60°/60°	
	Direction of view	Forward	Forward	Forward	Side	Side	Forward	Side	Forward	Side
	Depth of field*1	35 to ∞ mm	2 to 200 mm	17 to ∞ mm	2 to 15 mm	8 to ∞ mm	5 to ∞ mm	4 to ∞ mm	5 to ∞ mm	4 to ∞ mm
Oil Clearing		Available			—		—			

		6.0 mm Optical Tip Adaptors									
		AT40D-IV96G	AT80D/NF-IV96G	AT80D/FF-IV96G	AT120D/NF-IV96G	AT120D/FF-IV96G	AT80S-IV96G	AT120S/NF-IV96G	AT120S/FF-IV96G	AT220D-IV76	AT100D/100S-IV76
Optical system	Field of view	40°	80°	80°	120°	120°	80°	120°	120°	220°	100°/100°
	Direction of view	Forward	Forward	Forward	Forward	Forward	Side	Side	Side	Forward	Forward/Side
	Depth of field*1	200 to ∞ mm	9 to ∞ mm	35 to ∞ mm	2 to 200 mm	19 to ∞ mm	15 to ∞ mm	1 to 25 mm	3 to ∞ mm	1.6 to ∞ mm	2 to ∞ mm
Oil Clearing		Available									

### IPLEX RX/RT


		8.5 mm Optical Tip Adaptors				
		AT80D/FF-IV88	AT120D/NF-IV88	AT120D/FF-IV88	AT120S/NF-IV88	AT120S/FF-IV88
Optical system	Field of view	80°	120°	120°	120°	120°
	Direction of view	Forward	Forward	Forward	Side	Side
	Depth of field*1	35 to ∞ mm	4 to 190 mm	25 to ∞ mm	1 to 25 mm	5 to ∞ mm

### IPLEX YS

		8.5 mm Optical Tip Adaptors				8.5 mm Stereo Tip Adaptors	
		AT120D/NF-IV88Y	AT120D/FF-IV88Y	AT120S/NF-IV88Y	AT120S/FF-IV88Y	AT60D/60D-IV88Y	AT60S/60S-IV88Y
Optical system	Field of view	120°	120°	120°	120°	60°/60°	
	Direction of view	Forward	Forward	Side	Side	Forward	Side
	Depth of field*1	4 to 190 mm	25 to ∞ mm	1 to 25 mm	5 to ∞ mm	5 to ∞ mm	4 to ∞ mm

\*1 Indicates the range over which the image can be viewed clearly.

# Videoscope Comparison

Product image									
Product name		IPLEX NX	IPLEX GX	IPLEX GT	IPLEX G Lite	IPLEX RX	IPLEX RT	IPLEX YS	IPLEX TX
Scope diameter	Scope length								
	ø2.4 mm (0.09 in.)	—	—	—	—	—	—	—	✓
ø4.0 mm (0.16 in.)	1.2 m (3.9 ft.)	—	—	—	—	—	—	—	—
	2.0 m (6.6 ft.)	—	✓	—	✓	—	—	—	—
	3.5 m (11.5 ft.)	✓	—	—	—	—	—	—	—
ø6.0 mm (0.24 in.)	5.0 m (16.4 ft.)	✓	—	—	—	—	—	—	—
	2.0 m (6.6 ft.)	—	✓	—	✓	—	—	—	—
	3.5 m (11.5 ft.)	✓	—	—	—	—	—	—	—
	5.0 m (16.4 ft.)	✓	—	—	—	—	—	—	—
ø8.5 mm (0.33 in.)	7.5 m (24.6 ft.)	✓	—	—	—	—	—	—	—
	10.0 m (32.8 ft.)	—	✓	—	✓	—	—	—	—
	20.0 m (65.6 ft.)	—	—	—	—	✓	—	—	—
	30.0 m (98.4 ft.)	—	—	—	—	—	✓	—	—
Interchangeable scope unit		✓	✓	Available between the same scope model	—	—	—	—	✓
Articulation method		TrueFeel electronic scope tip articulation		TrueFeel electronic scope tip articulation	TrueFeel electronic scope tip articulation	TrueFeel scope tip articulation		Pneumatic pressure scope tip articulation	Direct manipulation
Articulation direction		U/D/L/R		U/D/L/R	U/D/L/R	U/D/L/R		U/D/L/R	U/D
Articulation angles		130° (IV9435N/IV9450N) 180° (IV9635N/IV9650N) 150° (IV9675N)		130° (IV9420G/IV9435G) 150° (IV9620G/IV9635G) 120° (IV9675G) 110° (IV96100G)	130° (IV9420GL/IV9435GL) 150° (IV9620GL/IV9635GL) 110° (IV96100GL)	70° as reference value		60°	135°
Dimensions (W × H × D)		320 mm × 310 mm × 180 mm (12.6 in. × 12.2 in. × 7.1 in.)		Main unit: 241 mm × 190 mm × 70 mm (9.5 in. × 7.5 in. × 2.8 in.) Scope unit: 97 mm × 188 mm × 158 mm (3.8 in. × 7.4 in. × 6.2 in.)	128 mm × 203 mm × 110 mm (5.0 in. × 8.0 in. × 4.3 in.)	Main unit: 227 mm × 189 mm × 64 mm (8.9 in. × 7.4 in. × 2.5 in.) Control unit: 365 mm × 192 mm × 93 mm (14.4 in. × 7.6 in. × 3.7 in.)		472 mm × 522 mm × 380 mm (18.6 in. × 20.5 in. × 15 in.)	Main unit: 239 mm × 215 mm × 99 mm (9.4 in. × 8.5 in. × 3.9 in.) Control unit: 49 mm × 59 mm × 334 mm (1.9 in. × 2.3 in. × 13.2 in.)
Approx. weight		7.1 to 7.6 kg (15.7 to 16.8 lbs)		2.76 to 3.43 kg (6.1 to 7.6 lbs)	1.15 to 1.83 kg (2.5 to 4 lbs)	5.2 kg (11.4 lbs)		27 kg (59.5 lbs)	2.2 kg (4.9 lbs)
Monitor size (inches)		8.4		8.0	4.3	6.5		8.4	6.5
Touch screen		✓		✓	✓	—		—	—
High temperature sensor		✓		✓	✓	✓	—	✓	—
SmartTip adaptor		✓		—	—	—		—	—
Oil clearing tip adaptor (direct view only)		—		✓	✓	—		—	—
Illumination		Laser diode		LED	LED	LED tip adaptor		Laser diode	LED tip adaptor
Light sources		White		White (standard), UV (option), IR (option)	White (standard), UV (option), IR (option)	White		White	White
Gain control (Auto, WIDER, Manual)		✓		✓	Auto only	✓	—	✓	✓
Measurement		Stereo with 3D modeling Scalar		Stereo (optional) Scalar	Scalar	Stereo (optional) Scalar		Stereo	—
Spot Ranging		5 points		1 point	—	1 point		1 point	—
Constant video recording		—		✓	—	—		—	—
Bookmark on video		—		✓	✓	—		—	—
Recording media		USB flash memory (still image recording only) SDHC		SDHC microSDHC	SDHC microSDHC	USB flash memory		USB flash memory CF card	USB flash memory
Still image recording	Resolution	H768 × V576 – 4 mm scopes H1024 × V768 – 6 mm scopes		H768 × V576	H768 × V576	H768 × V576		NTSC: H640 × V480 PAL: H768 × V576	NTSC: H640 × V480 PAL: H768 × V576
	Recording format	Compressed JPEG format		Compressed JPEG format	Compressed JPEG format	Compressed JPEG format		JPEG TIFF	Compressed JPEG format
Video recording	Resolution	H768 × V576 – 4 mm scopes H1024 × V768 – 6 mm scopes		H768 × V576	H768 × V576	H640 × V480		NTSC: H320 × V240 / H640 × V480 PAL: H384 × V288 / H768 × V576	H640 × V480
	Recording format	MPEG 4 AVC/H.264 Windows Media Player 12 compatible		MPEG 4 AVC/H.264 conforms to Baseline Profile. Windows Media Player 12 compatible	MPEG 4 AVC/H.264 conforms to Baseline Profile. Windows Media Player 12 compatible	AVI MPEG-4 format Windows Media Player compatible		AVI format, Motion JPEG compression Windows Media Player compatible	AVI MPEG-4 format Windows Media Player compatible
Audio recording		✓		✓	✓	—		✓	—
Video out		VGA		HDMI Type A	HDMI Type C	VGA		BNC S-video	RCA Composite
Battery operation time (approx. minutes)		100		150	90 <sup>*2</sup>	100		120	150
MIL-STD compliance		✓		✓	✓	—		—	—
IP standard		IP55		IP65	IP65	IP55		—	IP55
Image sharing/Live image streaming		Toshiba FlashAir Wireless LAN SD card for image sharing		Attach the recommended USB wireless LAN adapter to the Type A USB connector for live image streaming	Attach the recommended USB wireless LAN adapter to the Type A USB connector for live image streaming	Recommended Wireless LAN (Video Transmitter VT200-RGB*1) enables users to share live video, capture images, and record video using an iPad digital device		—	—

\*1 Sales area of this product is limited to Japan, United States, Canada, China and Europe.  
\*2 Extend the life of the battery by using the ECO mode lighting control

# Fiberscopes/Rigid Borescopes

## General Scopes

### IF Series (Fiberscopes)

Diameter: 0.64 mm/2.4 mm Lengths: 490 mm to 1,170 mm



#### IF Series Specifications / Operating Environment

		IF6PD4		IF2D5	
Scope diameter		ø0.64 mm (0.03 in.)		ø2.4 mm (0.09 in.)	
Scope length		490/990 mm (19.3 in./39 in.)		600/1,170 mm (23.6 in./46.1 in.)	
Articulation		—		Up/ Down	
Articulation angle		—		120°	
Depth of field		1 to 50 mm (0.04 in. to 2 in.)		2 to 50 mm (0.08 in. to 2 in.)	
Operating temperature	Insertion tube	In air	10 °C to 40 °C (50 °F to 104 °F)		
		In water	10 °C to 30 °C (50 °F to 86 °F)   10 °C to 40 °C (50 °F to 104 °F)		
	Other parts than above	In air   10 °C to 40 °C (50 °F to 104 °F)			
Waterproof	Insertion tube	—		✓	

## Features

- Scope diameter as small as 0.64 mm (0.03 in.)
- Image recording with video camera

## Clear Image with Optical Lens

### Series 5 Rigid Borescopes

Diameter: 4.1 mm to 16.1 mm Lengths: 21.0 cm to 134.0 cm



#### Standard Rigid Borescopes

Product code	Outer diameter	Effective length	Direction of view	Field of view	Depth of field
R040-021-000-60	ø4.1 mm (0.16 in.)	21 cm (8.3 in.)	0°	60°	5 to ∞ mm
R040-022-045-60		22 cm (8.7 in.)	45°		
R040-022-090-60			90°		
R040-033-000-60		33 cm (13 in.)	0°		
R040-033-045-60			45°		
R040-033-090-60	90°				
R060-017-000-50	17 cm (6.7 in.)		0°		
R060-017-045-50			45°		
R060-017-090-50		90°			
R060-032-000-50		32 cm (12.6 in.)	0°		
R060-032-045-50			45°		
R060-032-090-50	90°				
R060-047-000-50	47 cm (18.5 in.)		0°		
R060-047-045-50			45°		
R060-047-090-50		90°			
R060-063-045-50		63 cm (24.8 in.)	45°		
R060-063-090-50			90°		
R060-078-090-50	90°				
R080-024-000-50	24 cm (9.4 in.)	0°			
R080-024-045-50		45°			
R080-024-090-50		90°			
R080-024-110-50		110°			
R080-025-090-35		25 cm (9.8 in.)	90°		
R080-034-090-50	34 cm (13.4 in.)	90°			
R080-034-110-50		110°			
R080-044-000-50		44 cm (17.3 in.)	0°		
R080-044-090-50	90°				
R080-054-090-50	90°				
R080-064-000-50	64 cm (25.2 in.)		0°		
R080-064-090-50			90°		
R080-084-090-50		90°			
R080-104-000-50	104 cm (41 in.)	0°			
R080-104-090-50		90°			
R080-124-000-50		0°			
R080-134-090-50	134 cm (52.8 in.)	90°			
R080-144-090-50		90°			
R100-038-000-50	ø10.1 mm (0.4 in.)	38 cm (15 in.)	0°	50°	5 to ∞ mm
R100-039-090-35		90°	35°		
R100-039-090-50		39 cm (15.4 in.)	90°	50°	
R100-039-110-50			110°	50°	
R100-053-090-50			53 cm (20.9 in.)	90°	
R100-066-000-50	66 cm (26 in.)	0°	50°	5 to ∞ mm	
R100-067-090-50		67 cm (26.4 in.)			90°
R100-095-090-50		95 cm (37.4 in.)			90°

#### Swing-Prism Borescopes (built to order)

Product code	Outer diameter	Effective length	Direction of view	Field of view	Depth of field
R060-023-045SW115-50	ø6.1 mm (0.24 in.)	23 cm (9.1 in.)	45 to 115°	50°	5 to ∞ mm
R060-031-045SW115-50		31 cm (12.2 in.)			
R060-046-045SW115-50		46 cm (18.1 in.)			
R080-023-045SW115-50		23 cm (9.1 in.)			
R080-033-045SW115-50		33 cm (13 in.)			
R080-043-045SW115-50	ø8.1 mm (0.32 in.)	43 cm (16.9 in.)	20°	30 to ∞ mm	
R080-044-045SW115-20		44 cm (17.3 in.)			
R080-053-045SW115-50		53 cm (20.9 in.)			
R080-063-045SW115-50		63 cm (24.8 in.)			
R080-083-045SW115-50		83 cm (32.7 in.)			
R080-103-045SW115-50	103 cm (40.6 in.)	50°	5 to ∞ mm		

#### Zoom Swing-Prism Borescopes (built to order)

Product code	Outer diameter	Effective length	Direction of view	Field of view	Depth of field
R060-024-045SW115-50ZM25	ø6.1 mm (0.24 in.)	24 cm (9.4 in.)	45 to 115°	25 to 50°	5 to ∞ mm
R060-032-045SW115-50ZM25		32 cm (12.6 in.)			
R060-047-045SW115-50ZM25		47 cm (18.5 in.)			
R060-062-045SW115-50ZM25		62 cm (24.4 in.)			
R080-024-045SW115-50ZM25		24 cm (9.4 in.)			
R080-034-045SW115-50ZM25	ø8.1 mm (0.32 in.)	34 cm (13.4 in.)	25 to 50°	5 to ∞ mm	
R080-044-045SW115-50ZM25		44 cm (17.3 in.)			
R080-054-045SW115-50ZM25		54 cm (21.3 in.)			
R080-064-045SW115-50ZM25		64 cm (25.2 in.)			

#### Operating Environment

Operating temperature	Insertion tube	In air: -20 °C to 150 °C (-4 °F to 302 °F)
	Other parts than above	Underwater: 10 °C to 30 °C (50 °F to 86 °F)
	Other parts than above	In air: -20 °C to 50 °C (-4 °F to 122 °F)
Operating atmospheric pressure	Insertion tube	In air: 700hPa to 1,700hPa
	Other parts than above	Underwater: Up to 1,700hPa
Liquid resistance	No trouble even when machine oil, light oil or 5% saline is attached.	
Waterproof	Insertion tube	Waterproof: can be used underwater
	Other parts than above	Drip-proof

# MK Modular Mini-Scopes

## Ultra-Thin Scopes

### MK Modular Mini-Scopes

Diameter: 1.2 mm to 2.7 mm Lengths: 96 mm/186 mm



## Features

- Diameter as small as 1.2 mm (0.05 in.)
- Interchangeable scope unit
- Versatile lineup of viewing directions
- Image recording with video camera

#### MK Modular Mini-Scope

Product code	Outer diameter	Effective length	Direction of view	Field of view	Depth of field
MK012-009-000-45	ø1.2 mm (0.05 in.)	96 mm (3.8 in.)	0°	45°	1 to ∞ mm
MK012-009-015-53			15°	53°	
MK017-009-000-62	ø1.7 mm (0.07 in.)	96 mm (3.8 in.)	0°	62°	1 to ∞ mm
MK017-009-015-80			15°	80°	
MK017-009-090-62			90°	62°	
MK017-018-000-62			0°	62°	
MK017-018-015-80			15°	80°	
MK017-018-090-62	ø2.7 mm (0.11 in.)	186 mm (7.3 in.)	90°	62°	1 to ∞ mm
MK027-018-000-62			0°	62°	
MK027-018-015-80			15°	80°	
MK027-018-090-62			90°	62°	

# Accessories

## For Videoscopes

### Rigid Sleeve

- MAJ-1737 (For 4.0 mm dia. insertion tube)
- MAJ-1253 (For 6.0/6.2 mm dia. insertion tube)

Rigid sleeves allow easy insertion of videoscopes.



### High Temperature Guide Tube (built to order)

- For 4.0 mm/6.0 mm insertion tube

The high temperature guide tube is able to operate in environments up to 250 °C (482 °F) (Requires external air supply)



### Flex-and-Stay

Semi-flexible guide tube can be bent and fixed in any shape to allow easy insertion of videoscopes.



## For Fiberscopes / Rigid Borescopes

### C-Mount Adaptors

To connect a camera to a fiberscope or rigid borescope



Scope	C-mount adaptor	Magnification ratio	Brightness ratio
IF6PD4, IF2D5 Rigid Borescopes Miniboscopes	AK2-3C	0.42	5.7
	AK2-4C	0.56	3.2
	AK2-5C	0.75	1.8
	AK2-10C	1.0	1.0
	AK2-20C	1.35	0.55

### Light Guide Cable

This accessory transmits light from a separate light source



#### Light Guide Cable Variation

Product code	Cable length	Description
LLGC SERIES 300 3MM X 1.8M	1.8 m	For rigid borescopes with outer diameter of ø6.1 mm or smaller
LLGC SERIES 300 3MM X 2.5M	2.5 m	
LLGC SERIES 300 5MM X 1.8M	1.8 m	
LLGC SERIES 300 5MM X 2.5M	2.5 m	
LLGC SERIES 300 5MM X 4.5M	4.5 m	
LLGC SERIES 300 5MM X 0.75M	0.75 m	For MK Modular Mini-Scopes
LLGC SERIES 300 5MM X 6.0M	6 m	
LIQUID LIGHT GUIDE MK 3MM X 1.8M	1.8 m	
LIQUID LIGHT GUIDE MK 3MM X 2.5M	2.5 m	
LIQUID LIGHT GUIDE MK 3MM X 5.0M	5 m	
LIQUID LIGHT GUIDE MK 3MM X 2.5M	2.5 m	For rigid borescopes with outer diameter of ø8.1 mm or larger
KFLG-1 FUSED LIGHT GUIDE 12MM X 1.0M	1 m	
KFLG-2 FUSED LIGHT GUIDE 12MM X 2.2M	2.2 m	
KFLG-3 FUSED LIGHT GUIDE 12MM X 3.0M	3 m	
KFLG-5 FUSED LIGHT GUIDE 12MM X 5.0M	5 m	

# Light Sources

## Compact LED Light Source for MK Modular Mini-Scopes ILD-3

The ILD-C version is not available in China or South Korea

Both AC/DC power available

### ILD-3 Specification

	ILD-3
Power supply	3VDC single use batteries ILD-C
Dimensions	55 mm (2.2 in.) long x 30 mm (1.2 in.) diameter
Weight	65 g (0.14 lb) without CR123 battery
Operation time	1.5 hours per interchangeable battery or 8 hours at full brightness from the ILD-C



## LED Light Source LG-LSLED-RVI

Featuring a long-life white LED, the LG-LSLED-RVI light source is approx. 100 times brighter than the ILK-7 halogen light source yet consumes about half the power. This low consumption model meets most industrial needs.

### Specifications

	LG-LSLED-RVI
Voltage	DC 24 V
Power consumption	37 W
Dimensions (W x H x D)	114 mm x 137 mm x 231 mm
Weight	2.45 kg
LED life time	Approx. 60,000 hours



## Compact LED Light Source ILD-2

Not available in China, South Korea, California (USA), and Oregon (USA)

ILD-C connected LED light source

### ILD-2 Specification

	ILD-2
Power supply	ILD-C or Accessory Desktop PSU
Dimensions	81 mm (3.2 in.) long x 38 mm (1.5 in.) diameter
Weight	108 g (0.23 lb)
Operation time	2.5 hours at full brightness from the ILD-C



## Halogen Light Sources ILK-7/ ILK-7A/ ILK-7B

Not available in South Korea

The ILK-7 range of light sources incorporates a 150 W tungsten-halogen lamp offering the features necessary to meet most industrial needs

### Specifications

	ILK-7	ILK-7A	ILK-7B
Voltage	100-120 V 50-60 Hz, 115 V 400 Hz	100-240 V 50-60 Hz, 115 V 400 Hz, 11-15V DC	100-240 V 50-60 Hz, 115 V 400 Hz
Power consumption	280 W	250 W	250 W
Dimensions	178 mm x 76 mm x 230 mm (7 in. x 3 in. x 9 in.)		
Weight	2.3 kg (5 lb)		



## Brightness Control Box for ILD-2/ ILD-3 ILD-C

Not available in China, South Korea, California (USA), and Oregon (USA)

Rechargeable battery-driven brightness controller

### ILD-C Specification

	ILD-C
Power supply	9 to 19 VDC
Power consumption	38 W max when charging
Dimensions	130 mm x 90 mm x 38 mm (5.1 in. x 3.5 in. x 1.5 in.)
Weight	650 g (0.14 lb)



## UHP High-Intensity Light Source ILP-2

Not available in South Korea

Our most powerful light source

### ILP-2 Specification

	ILP-2
Voltage	100-240 V AC, 10-15 V DC
Power consumption	100 W
Dimensions	166 mm x 109 mm x 261 mm (6.5 in. x 4.3 in. x 10.3 in.)
Weight	2.9 kg (6.4 lb)



Not available for small-diameter borescopes. When used with other rigid borescopes, connectable light guides differ depending on the borescope model. Please ask your local Olympus sales representative for details.

## Connecting Scope Adaptors for ILD-2/ ILD-3

A range of adaptors to connect compact light sources to our rigid borescopes and fiberscopes.

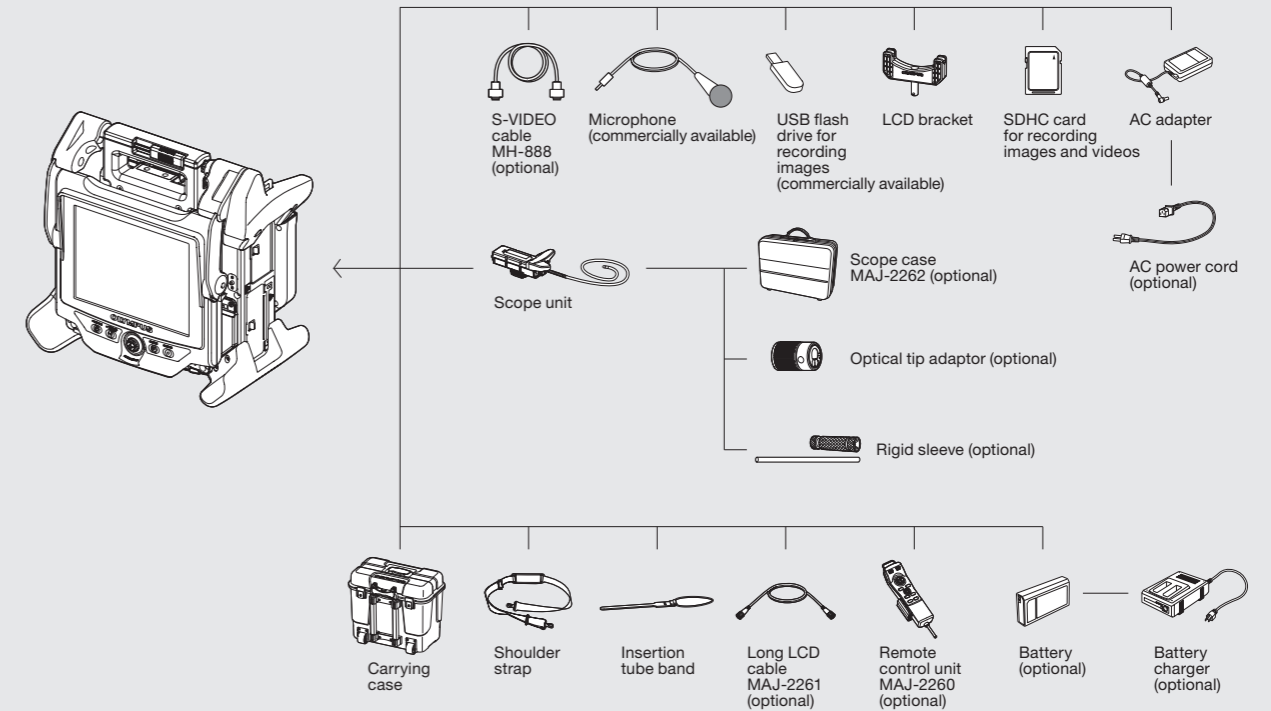
	ILD-2	ILD-3	Adaptor Shape
Series 5 Rigid Borescopes	✓	✓	
Fiberscopes	✓	✓	

\*No adaptor needed to connect ILD-3 to MK Modular Mini-Scope

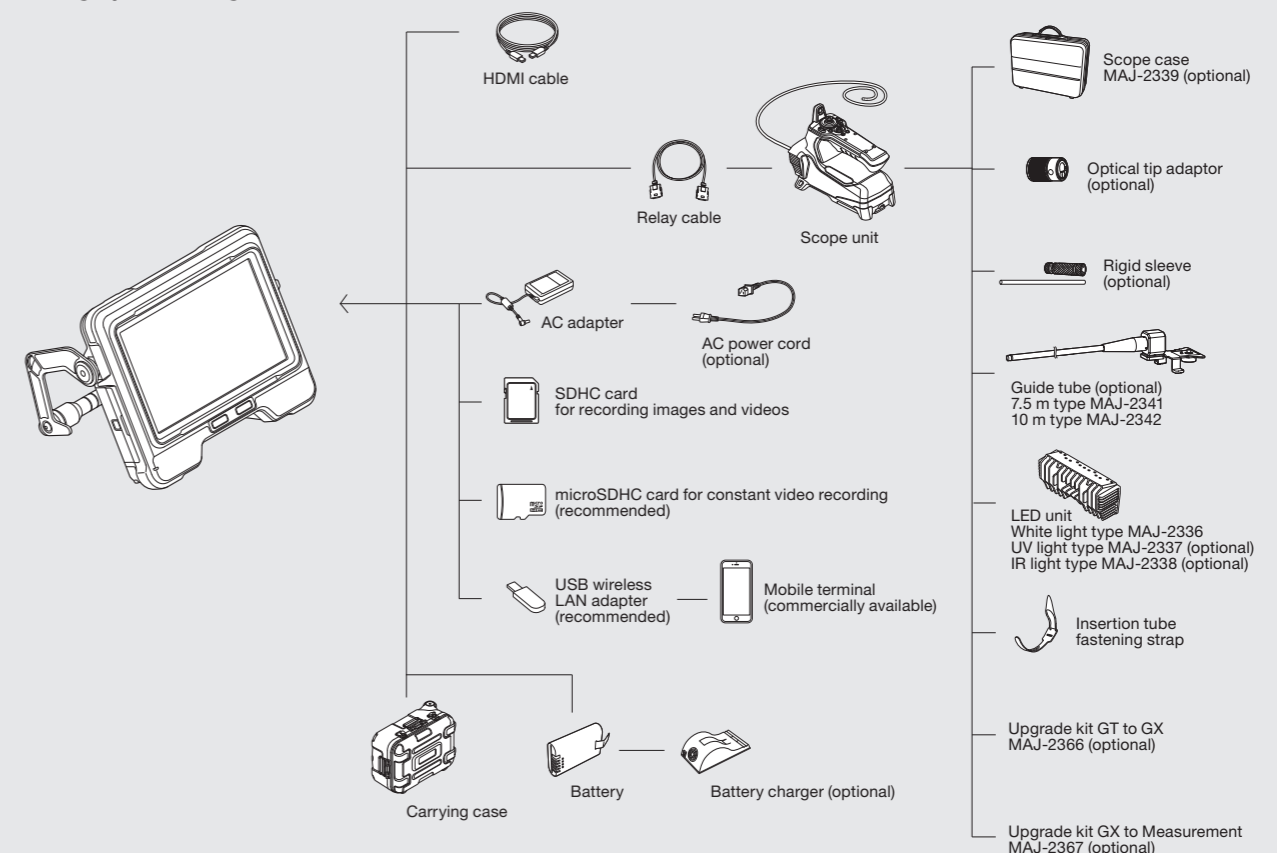
# System Charts

## Videoscopes

### IPLEX NX

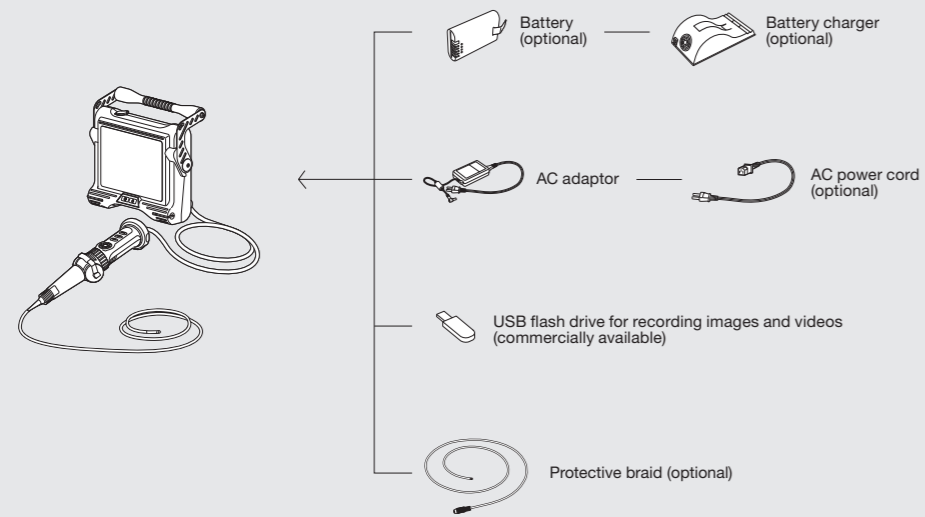


### IPLEX GX/ IPLEX GT

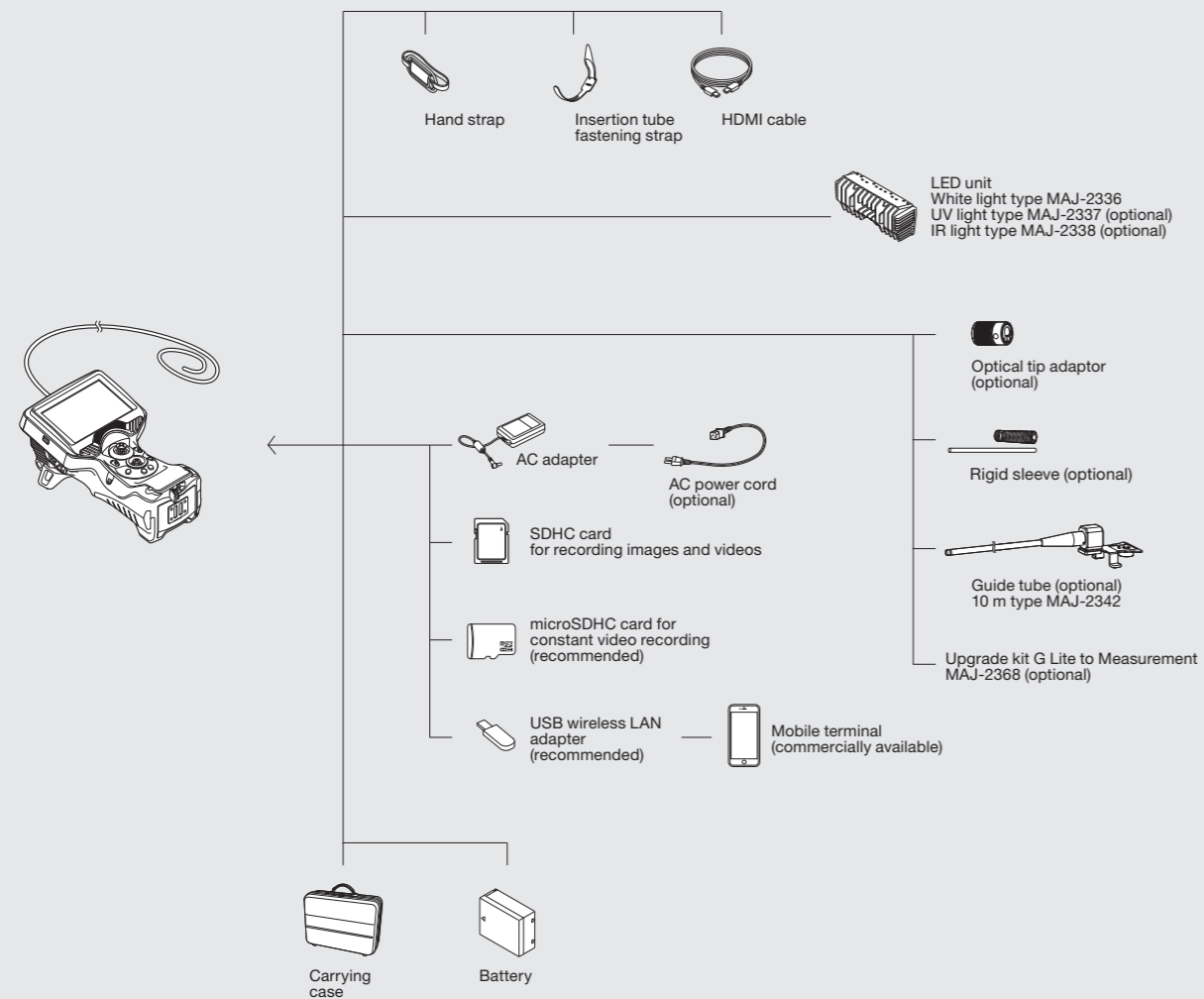


# System Charts

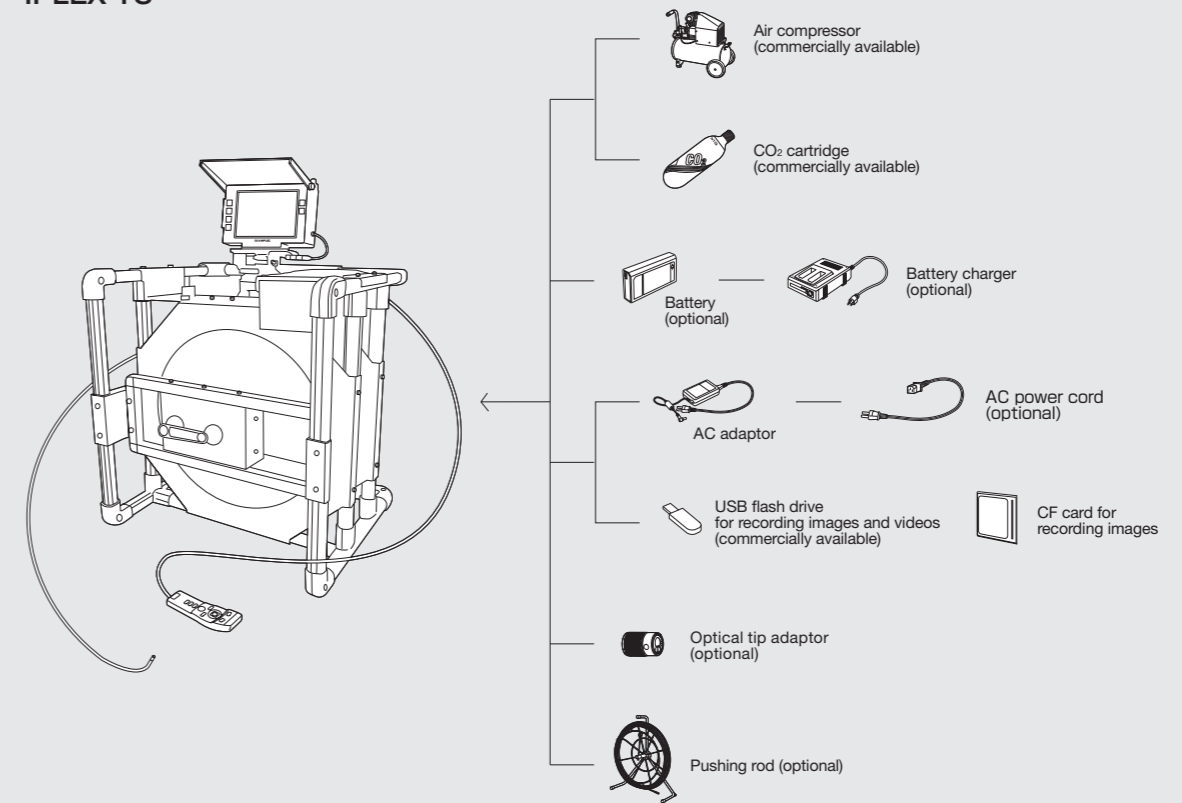
## IPLEX TX



## IPLEX G Lite



## IPLEX YS



## Fiberscopes and Rigid Borescopes

### Eye-piece Observation System

