

**Application Notes** 

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# Extra-Long Videoscope Withstands Tough Inspection Environments

The IPLEX™ GAir extra-long videoscope is thoughtfully designed to ease the inspections of long pipes and tubes in various industrial plants, such as thermal and nuclear power plants, oil and gas refineries, and manufacturing sites. The videoscope has also passed several durability tests, demonstrating its ability to maximize equipment uptime and minimize maintenance costs in tough inspection environments.

#### Durable Scope Articulation Withstands Heavy Use

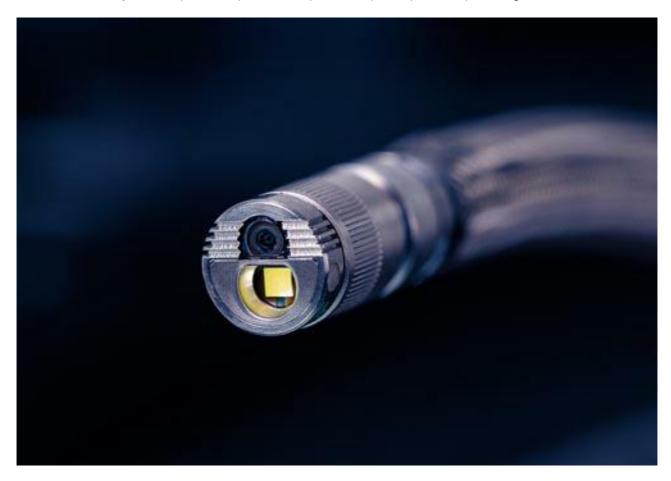
The IPLEX GAir videoscope features a pneumatic articulation system driven by air pressure, which lets you precisely control the scope tip angle at any insertion length. This helpful feature is also rugged for heavy use.

The videoscope has passed severe quality tests where the scope tip was articulated a thousand times, without loss of articulation. The tough insertion tube and durable articulation help ensure the videoscope can withstand severe use and keep your inspection going for longer.



## Interchangeable Tip Adaptors Provide Convenience in Challenging Applications

The IPLEX GAir videoscope works with a wide range of tip adaptors with different optical characteristics, including a wide field of view, so that you can easily find one suited to your specific inspection. The tip adaptors also feature drop resistance thanks to the precisely designed metal frame on the lenses. Even if a lens is damaged on-site, there is no need for costly and complicated repairs. Just replace the optical tip and keep working.



### Insertion Tube Tested to Perform in Tough Inspection Environments

The insertion tube on the IPLEX GAir videoscope is covered with a robust tungsten braid for use in rough environments. Demonstrating superb resistance against abrasion, the insertion tube passed our severe friction test using a steel blade more than 10,000 times. In addition, the four-layer insertion tube has excellent crush resistance.



## Integrated and Tough Air Compressor

The IPLEX GAir videoscope has a built-in compact air compressor so that you can easily carry all necessary items for the inspection to various inspection sites—with no need for external parts or additional power supply. Thanks to the unique anti-dust filter mounted in the air compressor, the videoscope can also be used outdoors.



Built-in compact air compressor with anti-dust filter

#### Tested and Proven Radiation Resistance

The insertion tube on the IPLEX GAir videoscope features high radiation resistance. The light source is located on the tip of the scope, eliminating the need for a light guide and making the system less vulnerable to radiation. The scope can deliver inspected images even after being exposed up to 1,400 Gy\* radiation doses. As a result, the IPLEX GAir videoscope is a reliable and rugged inspection instrument for nuclear power generation facilities.

\*Based on Olympus test results at an external testing facility. Please contact Olympus for details.

#### **Related Product**



#### **IPLEX GAir**

The IPLEX GAir videoscope helps users reach far away inspection targets quickly and easily. With a 30 m (98 ft) and 20 m (65 ft) scope, air articulation, live image orientation, and other features that enable you to navigate precisely and capture high-quality images, the IPLEX GAir videoscope helps inspectors maneuver to targets quickly and efficiently.

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