

PANORAMO® 4K

Perhaps the greatest innovation in pipeline inspection technology in decades, the PANORAMO® system has provided better data to engineers, reduced stress for operators, increased productivity and changed the way we inspect our underground infrastructure. Now, with the revolutionary PANORAMO® 4K technology, it provides even better image quality. Inspect more than twice as much pipe per day, reduce your operating costs by more than 30% compared to normal CCTV and provide system users with incredible high-definition imagery!

Performance is Key

PANORAMO® 4K is fast. Users collect data at a rate of up to 69 ft. (21m) per minute with PANORAMO® 2 4K, and 40 ft. (12m) per min with PANORAMO® 150 4K, without needing to stop. All this adds up to a technology that reduces your cost, increases your production and dramatically enhances your deliverables.



PANORAMO® 150 4K
Inspect pipelines from
6" (150mm) and up.



PANORAMO® 2 4K
Inspect pipelines from
8" (200mm) and up.

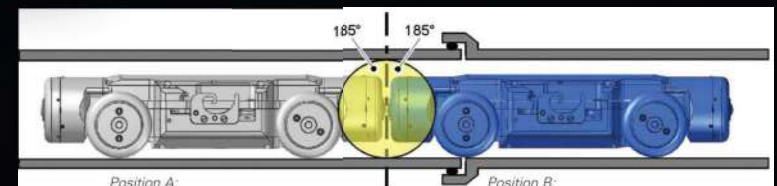
Technical Specifications

Max Speed	69ft. (21m)/Min.
Pipe Diameter	6" (150 mm) and up
Pressure Protection	Standard
Viewer Software	Free, distributable
Cameras	Twin 185° Digital
Zoom	Digital
3-D Perspective View	Standard
Side Scan (Unfolded) View	Standard
Measurement	Standard in Unfolded View
Lighting (PANORAMO® 2)	Xenon Strobe
Lighting (PANORAMO® 150)	High Power LED

IBAK PANORAMO® 4K

The PANORAMO® Principle - Changing your process

IBAK designed PANORAMO® from the ground up to address the weaknesses of traditional video technology. The PANORAMO® method changes your current process into data collection in the field and data analysis back in the office. This division of labor increases safety, reduces mistakes and increases productivity. The technology enables your employees to work to their potential and avoid costly and time-consuming mistakes caused by inattention or stress.



Easy Data Collection - Amazing Results

Inspecting a manhole with PANORAMO® SI 4K is as simple as 1-2-3. All you have to do is lower the unit into the manhole, turn it on, and pull it back up! No other system captures the quality or quantity of data that PANORAMO® SI 4K does.

Types of Data

The PANORAMO® SI 4K captures a complete 360° Perspective View of the manhole which you can view at any time, from any angle. The Unfolded View allows you to look at the entire manhole surface on one screen and the Geometric View allows you to measure features inside the manhole in three dimensional space. Simply export the Geometric View out to any CAD program to continue your analysis!

100% Coverage | More than 4 times faster!

Other manhole inspection methods are slow, clumsy, and unsafe compared to PANORAMO® SI 4K . With its unique ability to capture every inch of the manhole from multiple angles - you will never miss an observation.

IBAK PANORAMO® SI 4K

The PANORAMO® SI 4K has revolutionized the way system owners inspect their buried structures. Manholes, duct boxes, storm drains, and any other underground chamber can be inspected quickly and safely with this system. Keep your employees safe, increase the productivity and accuracy of your crews and provide data that helps system owners make informed decisions!

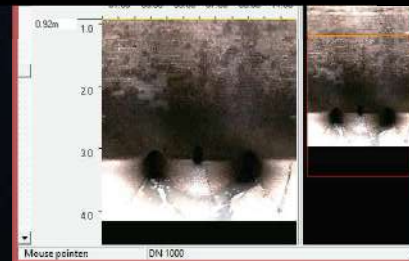
Technical Specifications

Max. Speed	14"(35cm)/sec.
Min. Diameter	12" (300 mm)
Pressure Protection	Standard
Viewer Software	Free, distributable
Cameras	Twin 185° Digital
Zoom	Digital
CAD output	dxf
3-D Measurement	Available

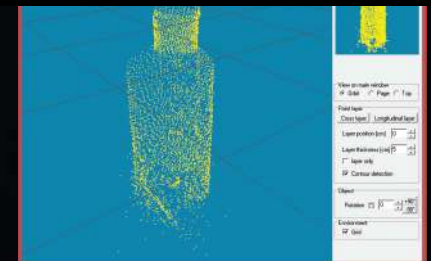
360° Perspective



Unfolded View



Geometric View



NOW WITH 4X INCREASED RESOLUTION!

1



Set up over the shaft.

2



Lower camera down to bottom of shaft.

3



Raise camera back up.