Technical data

MiniLite 3 technical system data	
Product classification	Compact push-rod camera system
Push rod	HD exchangeable reel with 80 m HD push rod (PP5 with 512 Hz transmitter)
	Exchangeable reel 500/12 with AxialCam push-rod camera, 30 m push rod (12 x 1.5 mm)
Control	Rugged tablet with high-definition 12" touch display (suitable for outdoors); BP 3 docking station for rugged tablet, (V1: 1 joystick, V2: 2 joysticks)
Data storage	Text input or storage of image and video files (MPEG 4 AVC/H.264) on the integrated PC, data transmission via WLAN/USB
Length measurement/ display	✓
Power pack	18VDC 4 Ah or 5 Ah (Li-ion), 2 pieces

Can be combined with	
IBAK cameras	AxialCam, POLARIS 3, ORION 3, ORION 3 L, NANO 2, NANO 2 L
IBAK extension system	✓
3D GeoSense	✓

Control console	BP 3
Width x height x depth	470 x 245 (290 with handle) x 73 mm
Weight	Approx. 3.2 kg
Connections	2x USB C, 2x USB A 3.0; current standard: Tablet Dell Latitude 7230
Data storage	Text input or storage of image and video files (MPEG 4 AVC/H.264) on the tablet PC, data transmission via USB 3.0 and via WLAN
Monitor	Protected against dust and water jets (IP55), approx. 12-inch touch display; suitable for daylight and low reflection
Battery charge level indicator	✓
Battery replacement indicator	✓
Length measurement/display	✓

Can be combined with	
IBAK cameras	All IBAK HD cameras, AxialCam
IBAK push rod system	BP 3 V1: MiniLite 3, BP 3 V2/V2 NH (emergency stop): MiniLite 3 and MainLite 2
IBAK tractor	BP 3 V2: T 66, T 76
IBAK cutting robot	BP 3 V2 NH: MicroGator Air
IBAK cable winches	KT 157, KW 207, KW 307
IBAK software	IKAS mini, IKAS evolution

EASY TO USE

1080 FullHD

Compatible cameras

Camera	AxialCam	NANO 2	POLARIS 3	ORION 3
MiniLite 3	✓	✓	✓	✓
Classification	Axial camera	Pan and tilt camera	Pan and tilt camera	Pan and tilt camera
Field of application	DN 50 and up	DN 80 and up	DN 100 and up	DN 100 and up
Push-rod operation	✓	✓	✓	✓
Tractor operation	✗	✓	✗	✓
Turning ability	(✓)	✓	✓	✓
SD	✓	✗	✗	✗
Full HD	✗	✓	✓	✓
Upright image	✓	✓	✓	✓
Correctly orientated image every 180° (eFlip)	✗	✓	✓	✓
3D GeoSense	✗	✓	✓	✓
Optical zoom	✗	✗	✗	✓
Digital zoom	✗	✗	✗	✓
Joint gap lighting	✗	✗	✗	✗

All IBAK products have one thing in common: They are "Made in Germany". All system components are developed, produced, assembled and tested at IBAK. With their high quality standard, IBAK products are the benchmark for investment security and cost-effectiveness – for 80 years now.

IBAK

MiniLite 3

1080 FullHD

IBAK
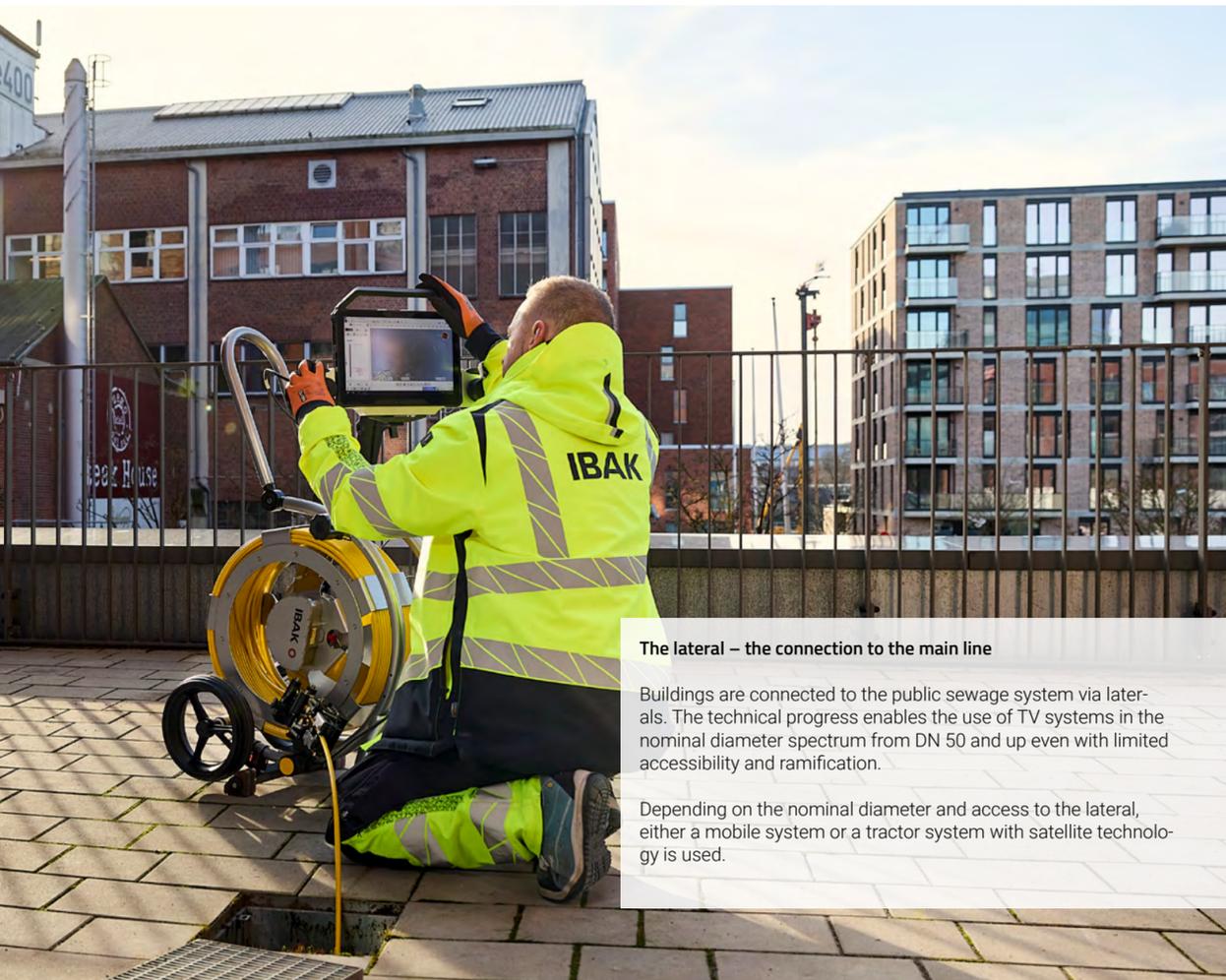
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The mobile solution for lateral and property sewer system inspections

The lateral – the connection to the main line

Buildings are connected to the public sewage system via laterals. The technical progress enables the use of TV systems in the nominal diameter spectrum from DN 50 and up even with limited accessibility and ramification.

Depending on the nominal diameter and access to the lateral, either a mobile system or a tractor system with satellite technology is used.

MiniLite 3
Push-rod camera system for small and medium nominal diameters
Application range from DN 50 and up

- **Can be used everywhere:** Typically for operation in laterals – even if they are strongly ramified
- **Added value:** Thanks to extensive measuring functions for qualified condition assessment
- **Versatile use:** Cameras and push rods can be adapted to any inspection requirement
- **More possibilities:** As an ideal addition to an IBAK tractor TV system
- **Fast data transmission:** Easy transmission of inspection results to the contractor

The **IBAK MiniLite 3** is a compact push-rod camera system for inspection of lateral and property sewer systems. It enables a wide range of applications thanks to the modular extendibility and many accessory parts.
The MiniLite 3 is equipped with a exchangeable reel with a 80-meter HD push rod (PP5) with an integrated 512 Hz transmitter as standard. The camera models **ORION, NANO** and **POLARIS** , which can also be used to determine the diameter, can be operated with it. Depending on requirements, the system can be equipped with an additional extension function (extension system) and software. For simple projects without complicated data exchange formats, the IKAS recorder is available. If inspections for sewage systems shall be recorded according to the European standard EN 13508-2, the IKAS mini can be installed and the inspection results can be issued as clearly-structured reports on paper or as PDF.
If specific data exchange formats are required or if a 3D site plan shall be created after a 3D GeoSense pipe run measurement, the use of a complete IKAS evolution is recommended.

IBAK AxialCam (SD)
Push-rod camera, axial view, use from DN 50 and up

Diameter: ø 39 mm
Video format: SD
System: MiniLite

IBAK POLARIS 3
Rotate and Pan and tilt camera from DN 100 and up

Diameter: ø 60 mm
Video format: HD
System: MiniLite, LISY

IBAK ORION 3 / ORION 3 L
Rotate and Pan and tilt camera from DN 100 and up

Diameter: ø 60 mm
Video format: HD
System: MiniLite, LISY, all current IBAK tractors

IBAK NANO / NANO L
Rotate and Pan and tilt camera from DN 80 and up

Diameter: ø 47 mm
Video format: HD
System: MiniLite, LISY, all current IBAK tractors

Application areas in push-rod and tractor operation

Both ORION and NANO can be connected not only to MiniLite and the LISY satellite units but also to IBAK tractor systems. Both cameras are particularly advantageous when used in inliner rehabilitated and/or ramified laterals.

IKAS mini / IKAS evolution
Software optionally available

Creating projects and generating reports

Even in the simple entry-level software version – the IKAS mini – inspections of sewage systems can be carried out according to the European standard EN 13508-2. Defect reports for sections and manholes as well as image and video recordings can be easily input and stored thanks to the intuitive menu navigation.

The inspection result is documented in clearly-structured reports and saved as a PDF. Using a USB stick, the data can also be easily forwarded to the customer with an interactive viewing program. This way, defect reports and the associated images and videos can be viewed in a clear display, also enabling amateurs to detect and comprehend the defects in the sewer pipes.

The IKAS mini offers the inspector maximum flexibility during the inspection without binding them to a rigid set of rules. If an inspection according to municipal regulations or specific data exchange formats (e.g. DWA-M 150) are required, an upgrade to the professional IKAS evolution can be purchased at any time.

MiniLite extension function
Extension system

Extension system function with voice connection

With the extension system, the MiniLite can be connected to a vehicle based system so that even difficult-to-access sections and laterals can be inspected from the vehicle.

Advantages:

- Transmission of the video and length values to the vehicle
- Convenient operation by using the software in the vehicle
- Parallel monitoring of the inspection by persons at the MiniLite and in the vehicle
- Communication of persons involved via a headset or loudspeaker and microphone in the vehicle