

KATEYE™ Downhole Video Tools

KATEYE™ Downhole Video Tool runs with Surface Read Out (SRO) mode by E-line or Memory Mode by slickline or drilling pipe. It is useful in oil & gas well industry, water well industry, as well as in geothermal and gas storage bank inspection.

With updated high-temp lens modules, the tool provides high-definition images/videos that cover the entire downhole casing inner wall from 2-3/8" up to 17" casing/tubing. The video quality has been guaranteed by unique illumination and lens design.

KATEYE™ Downhole Video Tool is compactly designed for fast transport, suitable for air delivery or hand-carry by the crew.

Features

Bi-directional digital telemetry communication system gives full control over video functions and ensures maximum flexibility. The intensity of the LED lights can be controlled from surface to achieve the best illumination condition.

Both side-view and down-view are controllable from surface.

Side-view is for checking the detailed images of the well wall, and down-view provides a full image of the hole.

KATEYE™ Downhole Video is equipped with dedicated lenses offering a wide depth of field and a broad 120-degree field of view. The side-view lens is rotatable 360 degrees, ensuring full coverage of the well walls. This allows for clear identification of corrosion or cracks, providing a detailed view of the casing wall.

KATEYE™ Downhole Video is equipped with one of the world's fastest telemetry modules, ensuring the highest quality and refresh rate for images and videos, outperforming competitors.



Applications

- **Imaging of Dropped Objects and Wellbore Fish:** High-resolution imaging to locate and identify dropped objects or debris (e.g., fish) in the wellbore.
- **Mechanical Inspection of Wellbore Hardware:** Detailed inspection of downhole equipment (e.g., casing, tubing, plugs) for wear, damage, or misalignment.
- **Corrosion and Erosion Monitoring:** Continuous monitoring and detailed assessment of wellbore integrity, focusing on material degradation due to corrosion and erosion.
- **Water, Gas, or Oil Entry Detection:** Real-time detection of unwanted water, gas, or oil influx into the wellbore, ensuring safe and efficient production.
- **Perforation Assessment and Monitoring:** Inspection and evaluation of perforation integrity and efficiency, ensuring optimal flow and reservoir connection.
- **Coal Bed Methane Well Evaluation:** Specialized imaging and inspection tools for evaluating coal bed methane wells, focusing on gas production and reservoir conditions.
- **Open Hole Imaging and Evaluation:** Advanced imaging technologies for detailed evaluation of open-hole formations, identifying features such as fractures, bedding planes, and porosity.

Technical Specifications

Diameter	43mm (1-11/16"), 140mm (5-1/2"), Optional OD of 98mm,130mm, 200mm
Pressure Rating	15,000 psi
Max Temperature	150 °C (302 °F), 260°C (500°F)
Camera	Full color
Connection	1-3/16 12 UNF (GO Type)
View of Angle	Side-view / Down-view
Max Transmission Rate	Realtime rate: ~1 frame/s by mono-cable
	Memory rate: 10 frame/s
Casing/tubing size	Up to 26"
Well Fluid	Water/Gas/Oil well
Cable	7/32", 5/16" mono-conductor cable, slickline
Logging Mode	Surface Read Out / Memory Mode
Memory Capacity	4 GB, 8GB
Battery	More than 80 hours battery working life time