

## CASED-HOLE LOGGING

# CAPACITANCE ARRAY TOOL



MAKING INTERVENTION  
**SMARTER**

Data interpretation in horizontal and highly deviated wells is difficult because fluid phases segregate, slug or re-circulate along the high angle section, often causing stratified flow. Conventional tools with sensors centralized in the wellbore only gauge flow properties in the middle of the wellbore and miss out what is happening in the circumference of the wellbore.

The Resistance Array Tool (RAT) and the Capacitance Array Tool (CAT) are tools with 12 miniature sensors mounted on collapsible bow springs. This design enables the sensors to intercept the fluid flowing along the circumference of the well bore, providing a more detailed picture of the flow regime and a more accurate PL interpretation. The software also generates the average hold-up for each phase.

The CAT is a 12-sensor fluid identification tool. Each sensor measures localised fluid capacitance and individual phase hold-up close to the wellbore. Different dielectric constants enable identification of oil, gas and water.

## FEATURES

- Phase identification independent of well deviation
- Cross-sectional water hold-up profile
- Calculation of percentage of each phase present
- Identification of water entry points
- Internal orientation sensor
- Combinable with other GE Ultrawire™ tools
- Memory or surface read-out operation'

SERVICE NAME	CAT
Length	1310 mm / 51.43 in
Weight	8.1 kg / 17.3 lbs
OD	43 mm / 1.688 in
Hold-up range	0-45% water hold-up
Maximum opening	7 in casing
Maximum pressure	1030 bar / 15 000 psi
Maximum temperature	177 °C / 350 °F