

## CASED-HOLE LOGGING

# SPINNER ARRAY TOOL

Fluid velocity and direction. The Spinner Array Tool (SAT) features six miniature turbines deployed on bowspring arms, enabling discrete local fluid velocities to be measured at 60 degree intervals around the wellbore.

## APPLICATIONS

Phase segregation occurs in many wells, even those with little deviation from vertical. Lighter phases migrate to the high side of the well, heavier phases to the low side. The individual phases flow at different velocities and possibly in different directions.

The Spinner Array Tool (SAT) provides direct measurement of individual phase velocities. Combined with holdup data from the Resistance Array Tool (RAT) and Capacitance Array Tool (CAT), this forms the Multiple Array Production Suite (MAPS), which makes it possible to provide quantitative estimates of the volumetric flow rate of each phase with a much higher degree of certainty and thus provide vital information for reservoir management.

## FEATURES

- Greater tolerance to well debris
- Reduced tool diameter
- Easier to service and maintain
- Cross-sectional velocity profiling
- 3D imaging of velocity profile with MAPview software
- Phase velocities in segregated fluid streams in deviated and horizontal wells
- Combinable with other GE Ultrawire™ tools
- Memory or surface read-out operation
- Production Inclinometer Accelerometer (PIA) recommended

SPECIFICATIONS	SPINNEY ARRAY TOOL
Length	1156mm/45.5in
Weight	7.8kg/17.2lbs
OD	43.7mm/1.72in
Pipe Range	Up to 7 in casing
Maximum Pressure	1030 bar/15,000psi
Maximum Temperature	177°C/350°F