

# Acoustic Borehole Imager (ABI™)

## QL40 ABI™ / ABI™40 GR



### Technical specifications

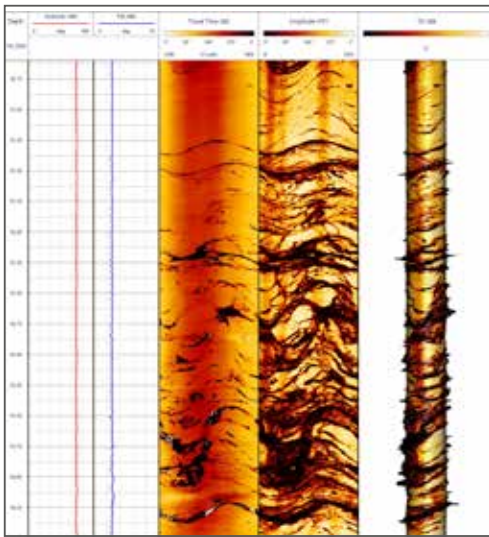
<b>Diameter</b>	40 mm (1.6")
<b>Length (min/max)</b>	1.62*/1.84 m** (63/72.4")
<b>Weight (min/max)</b>	6.7*/7.4 kgs** (14.7/16.3 lbs)
<b>Max temp</b>	70°C (158°F)
<b>Max pressure</b>	200 bar (2900 PSI)
<b>Acoustic sensor</b>	Fixed transducer and rotating focusing mirror
<b>Focusing</b>	Collimated acoustic beam
<b>Frequency</b>	1.2 MHz
<b>Rotation speed</b>	Up to 35 revolutions per second - automatic
<b>Caliper resolution</b>	0.08mm (0.003")
<b>Deviation sensor</b>	APS544-3 axis magnetometer - 3 axis accelerometer
<b>Natural gamma sensor</b>	Integrated (ABI40 GR) or in line sub (QL40 GR - QL40 GR CCL) 0.875" x 3" NaI (Ti) scintillation crystal

### Operating conditions

<b>Cable type</b>	Mono, multi-conductor, coax
<b>Compatibility</b>	Scout / Opal (ALTlogger / Bbox / Matrix)
<b>Digital data transmission</b>	
<b>Telemetry</b>	Variable baudrate telemetry according to cable length/type & surface system
<b>Logging speed</b>	Variable - function of image resolution, borehole diameter, wireline and surface system model. e.g. 8m/min in 7" diameter borehole with 144 azimuthal resolution - 4mm vertical sampling rate @ 250kbps baud rate.
<b>Centralisation</b>	Required
<b>Borehole fluid</b>	Water, water based mud, brine, oil (oil based mud not applicable)
<b>Measurement range</b>	Open hole: up to 20" - depending on mud conditions Cased hole: 5" to 20" - minimum thickness 5 mm

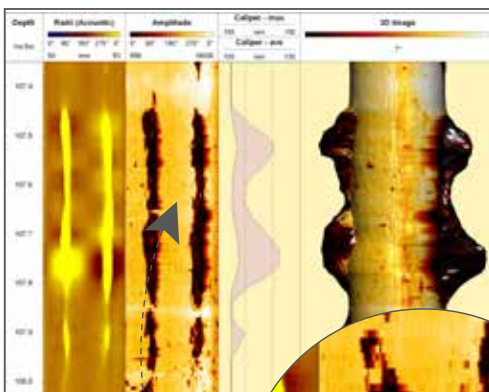
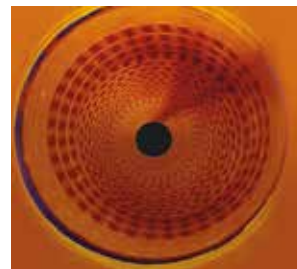
\*QL40 ABI / \*\*ABI40 GR





### Open hole

- Detailed and oriented caliper and structural information
- Borehole deformation (stress field analysis)
- Fracture detection and evaluation
- Breakout analysis
- Lithology characterization (detection of thin beds, determination of bedding dip)
- Rock strength



### Cased hole

- Casing inspection
- Inside & outside diameter
- Casing thickness & corrosion rate
- Scale & hole detection
- Casing wear & deformation
- Metal loss indicators

