

# Acoustic Borehole Imaging Tool (ABI or ATV)

## Advanced Logic Technologies (ALT) ABI-40

### Operating Constraints:

Maximum pressure ..... 2900 PSI  
Operation temperature range ..... 0 to 70 degrees C, 32 to 158 degrees F  
Borehole diameter range..... 2 – 21 in., 5 – 53 cm, depending on mud & borehole conditions

### Dimensions:

Length..... 67 in., 170 cm  
Diameter ..... 1.55 in., 4.0 cm  
Weight ..... 13.2 lbs, 6 kg

### Acoustic Assembly:

Sensor..... Fixed transducer with rotating focusing mirror  
Focusing..... 6 in., 15.24 cm  
Frequency..... 1.2 Mhz  
Acoustic beam width..... 0.381 in., 1.5mm (-3db) focal distance  
Rotational speed..... Up to 10 revolutions/second  
Azimutal resolution..... 72-144-288 pixels/360 degree revolution

### Deviation Sensor:

Orientation..... 3-axis magnetometer and 3 accelerometers  
Inclination accuracy ..... +/- 0.5 degrees  
Azimuth accuracy..... +/- 1.0 degrees

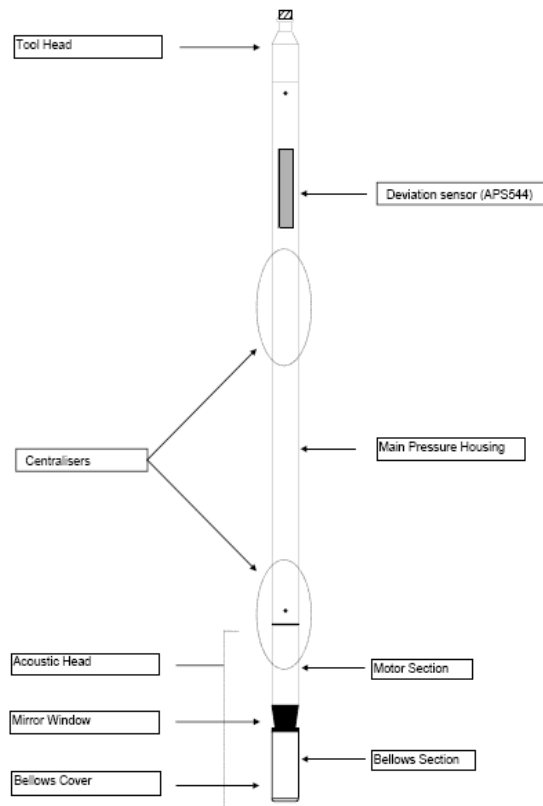


Figure 1-1 ABI40 General Arrangement