TELEVIEWERS

Televiewers provide continuous logs of oriented, unwrapped images of borehole walls. Further processing allows for the computation and display of standard information on fractures and other geological features.

The sondes come with image data acquisition software and an imaging modem with a USB high speed interface allowing communication speed of up to 312 Kbits/sec on wirelines of up to 1500 m and 208 Kbits/sec on wirelines of up to 2000 m.

Optical Televiewer

The Optical Televiewer provides high resolution video images of borehole walls. It can be run in both air filled and (clear) water filled holes. Log parameters include 360° oriented optical Image and Borehole azimuth and dip.

Specifications:

<table>
<thead>
<tr>
<th>Weight / Length / Diam.</th>
<th>5.0 kg / 1.63 m / 52 mm max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Press. / Temp.</td>
<td>100 bar extendable to 150 bar / 50°C</td>
</tr>
<tr>
<td>Borehole Diameter Range</td>
<td>70 to 300 mm, depending on conditions</td>
</tr>
<tr>
<td>Typical Logging speed</td>
<td>2.5m/min with 720 pixels horizontal and 1 mm vertical resolution</td>
</tr>
</tbody>
</table>

Optical Subsystem:

- Image resolution: 360 to 1440 pixels / circumference (user definable)
- Data rate: 1500 Kbps
- Colour resolution: 24 bit RGB
- Sensor: 1280x1024 CMOS image sensor
- Structural log and Image data format: Bitmap files
- Structural and orientation data format: ASCII files

Acoustic Televiewer

The Acoustic Televiewer provides “false colour” images of borehole walls. Can be run in both clear and opaque mud. Log parameters include 360° oriented Travel Time Image (12-bit resolution / 100 ns per bit), 360° oriented Amplitude Image and Borehole azimuth and dip.

Specifications:

<table>
<thead>
<tr>
<th>Weight / Length / Diam.</th>
<th>10.0 kg / 2.10 m / 42 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Press. / Temp.</td>
<td>200 bar / 70°C</td>
</tr>
<tr>
<td>Borehole Diameter Range</td>
<td>70 to over 400 mm, depending on borehole fluid conditions</td>
</tr>
<tr>
<td>Typical Logging speed</td>
<td>2.5m/min with 720 pixels horizontal and 1 mm vertical resolution</td>
</tr>
</tbody>
</table>

Acoustic Subsystem:

- Frequency: 1.5 MHz
- Beam angle: 3° conical
- Rotation speed: up to 20 rev/sec
- Sampling density: 90, 120, 180 or 360 per revolution
- Acquisition sampling rate: 100 nS
- Gain: 0 to 60 dB in 1 dB steps or Automatic Gain Control (AGC)

GeoVista reserve the right to change the products’ list and specifications without prior notice.