CORRELATION MEASUREMENT TOOL

THE ULTIMATE GEOSTEERING AND FORMATION CORRELATION MEASUREMENT TOOL
Sci-Quest™ Resistivity is SDI’s next-generation probe-based resistivity technology. It provides a fit-for-purpose and cost-effective solution for clients looking to collect resistivity measurements for use in qualitative analysis such as geosteering or formation correlation. Sci-Quest is designed to operate at higher temperatures, delivering better power management, and overall higher reliability.

**Delivering the Ultimate Value**

- Enhanced data quality, ensuring the accuracy and drilling confidence
- Better power management enabling longer runs downhole
- Innovative design allowing higher dog leg curves
- Optimal performance at temperatures up to 302°F (150°C)
- Premium serviceability delivering economical gain
- Streaming high-speed data allows for the calculation of the ranging result in real time
- Considered the most accurate long range tool on the market
- Improved reliability, greatly reducing non-productive time

**Target Applications**

- Geosteering
- Formation Correlation
- Payzone Identification
- Picking Casing and Coring Points

### PRODUCT SPECS

**Collar OD**

- 4.75 in
- 6.5 in
- 6.75 in
- 8 in

**Collar Length**

- 15 ft (MWD/LWD in separate collars)
- 30 ft (MWD/LWD in same collar)

**Max Dogleg (°100 ft)**

- Rotating Sliding
  - 10°
  - 8°
  - 6°
  - 26°
  - 19°
  - 16°
  - 12°

**Power Source & Operating Hours**

- Lithium Batteries - 150+ run hours
- 18,000 PSI
- 302°F (150°C)

**Max Weight on Bit (lb)**

- 15,000
- 40,000
- 40,000
- 52,000

**Max Rotary Torque (ft-lb)**

- 4,000
- 600
- 7,800
- 7,800
- 1,000

**Max Flow Rate (gal/min)**

- 330
- 7,800
- 750

**Sonde OD & Length**

- 1.75 in Diameter & 55 in long

**Memory Capacity**

- 2 GB

### Measurement Specifications

<table>
<thead>
<tr>
<th>Operating Frequency</th>
<th>2 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Spacing</td>
<td>23 in and 33 in</td>
</tr>
</tbody>
</table>

**Phase Shift Resistivity**

<table>
<thead>
<tr>
<th>Range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 in</td>
<td>±0.3%</td>
</tr>
<tr>
<td>20 to 80 ohm-m</td>
<td>±1.0%</td>
</tr>
<tr>
<td>80 to 1,000 ohm-m</td>
<td>±0.1 mS/m</td>
</tr>
</tbody>
</table>

**Attenuation Resistivity**

<table>
<thead>
<tr>
<th>Range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 in</td>
<td>±0.6%</td>
</tr>
<tr>
<td>20 to 80 ohm-m</td>
<td>±2.0%</td>
</tr>
<tr>
<td>80 to 1,000 ohm-m</td>
<td>±0.6 mS/m</td>
</tr>
</tbody>
</table>

**Vertical Resolution (inches)**

<table>
<thead>
<tr>
<th>R (ohm-m)</th>
<th>Phase</th>
<th>Attenuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2 ohm-m</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>1.0 ohm-m</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>10 ohm-m</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>20 ohm-m</td>
<td>14</td>
<td>60</td>
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**Depth Investigation (inches)**

<table>
<thead>
<tr>
<th>R (ohm-m)</th>
<th>Phase</th>
<th>Attenuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2 ohm-m</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>1.0 ohm-m</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>10 ohm-m</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>20 ohm-m</td>
<td>23</td>
<td>46</td>
</tr>
</tbody>
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**Borehole Correction Charts**

- Available upon request

**Updated July 2017**