

## Flexishot™ – EMS – Technology Specifications

The Flexishot™ – EMS provides high-accuracy, definitive survey information before the well is cased, in time to make any directional course corrections. EMMT is a cost-effective alternative to photomechanical wellbore survey tools, eliminating the need for film developing, while fitting in Peewee-size running gear.

<b>Instrument Accuracy</b>	<ul style="list-style-type: none"> <li>▪ <b>Accuracy:</b> Dependant on wellbore profile</li> <li>▪ <b>Typ Azimuth Accuracy</b> 0.5° SPE WPTS (ISCWSA) error model available on request</li> </ul>
<b>Operating Features</b>	<ul style="list-style-type: none"> <li>▪ <b>Instrument OD:</b> 1.0" (26mm)</li> <li>▪ <b>Instrument Length:</b> 36" max (incl battery housing)</li> <li>▪ <b>Pressure Case OD:</b> 1 3/4" (with thermal shield)</li> <li>▪ <b>Pressure Rating:</b> 18,000 psi</li> <li>▪ <b>Thermal Shield Perf.:</b> 10hrs at 400°F</li> <li>▪ <b>Data Storage:</b> raw data set</li> <li>▪ <b>Shot Capacity:</b> up to 5,000 surveys</li> <li>▪ <b>Power Source:</b> 6 AAA Alkaline Battery Cells</li> <li>▪ <b>Battery Life:</b> 40 Hrs (survey setup dependant)</li> <li>▪ <b>Surface Equipment:</b> Windows (98, XP, Vista, Win7+) based Drillog™</li> <li>▪ <b>Data Display:</b> Probe onboard LCD display (optional) or via PC using serial data link</li> </ul>
<b>Sensors</b>	<p>High accuracy Triax accelerometer set High accuracy triaxial magnetometers</p>
<b>Running Gear</b>	<p>The EMS is PeeWee compatible or can use industry standard 1 3/4" compatible running components</p>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>▪ <b>Max Temperature:</b> 32-400°F (200°C) with thermal shield for up to 8 hrs</li> <li>▪ <b>Shock:</b> 1,000g, 1/2 sine 1mS</li> <li>▪ <b>Vibration:</b> 10g rms 5-500Hz</li> </ul>

Note: Performance data is based upon measurements in a controlled environment and field results may vary.

## Flexishot™ – SLX – Technology Specifications

The Flexishot™ – SLX range of tools is a unique high accuracy electronic singleshot surveying instrument designed to meet three major demands of wellbore data acquisition. The system is modular in design and can be used in either Magnetic SingleShot Compass or Electronic Drift Indicator (TOTCO replacement) with any conventional type of non-magnetic running gear (including PeeWee) for the purpose of taking surveys or making orientations.

Instrument Accuracy	<ul style="list-style-type: none"> <li>▪ <b>Inclination:</b> 0-180° (or +/-90°)</li> <li>▪ <b>Azimuth:</b> 0-360°</li> <li>▪ <b>Gravity Toolface:</b> 0-360°</li> <li>▪ <b>Magnetic Toolface:</b> 0-360°</li> </ul>
Operating Features	<ul style="list-style-type: none"> <li>▪ <b>Instrument Length:</b> 89" long</li> <li>▪ <b>Pressure Case OD:</b> 1.75"</li> <li>▪ <b>Weight:</b> 1.75 lbs</li> <li>▪ <b>Pressure Rating:</b> 20,000 psi</li> <li>▪ <b>Magnetic Field (Btot):</b> 0-95, 000nT</li> <li>▪ <b>Data Storage:</b> 3,000 surveys</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>▪ <b>Temperature:</b> 14°F – 190°F with LCD module 14°F – 400°F with H/S</li> <li>▪ <b>Shock:</b> 1,000g, 1/2 sine 1mS</li> <li>▪ <b>Vibration:</b> 10g rms 5-500Hz</li> </ul>

Note: Performance data is based upon measurements in a controlled environment and field results may vary.