IGU-16HR 3C

Features

- New Generation Smart 3C Seismic Sensor
- High resolution data with up to 24ms sampling and 24400 nbins per second
- Button GPS receiver and disciplined high precision clock
- Based on the most highly regarded DLSOLO HS geophone
- Up to 30 days of continuous recording
- Most cost effective system on the market
- Light weight and compact size
- Share the same peripherals as IGU-16
- All-in-One Modular design provides maximum productivity, maintenance free operations and easy battery replacement
- 30 days of continuous recording
- Suitable for one station to million station operations
- Most cost effective system on the market
- 1.7 kg
- Compatible with vibroseis and impulsive energy sources
- Simple LED Status Indicator

TECHNICAL SPECIFICATIONS

- General Specifications
  - Parameters
  - Specification
  - Seismic data (channels)
  - 8
  - ADC resolution
  - 24 bits
  - Sampling interval
  - 0.25, 0.5, 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096, 8192 ms
  - Pre-emption Gain
  - 90 dB to 36 dB @ 6.6 kHz
  - Anti-alias filter
  - 20.5 kHz @ 2ms (62.8% of Nyquist)
  - Selectable - Linear Phase or Minimum Phase
  - Pre-emption filter
  - 16kHz to 180kHz
  - Temperature and DC screened
  - Operating temperature
  - -40°C ~ +70°C
  - Water proof
  - IP67
  - Data storage
  - 32GB (can be expanded to 64GB)
  - Physical size
  - 187mm H X 93mm W X 90mm D (AC enclosure)
  - 187mm H X 93mm W X 90mm D (AC enclosure)
  - Weight
  - 2.4 kg (including internal battery and spike)
  - 1.7 kg (including internal battery and spike)
  - Operating life @ 25°C
  - 30 days Continuous @ 2ms
  - 60 days Segmented @ 2ms
  - 120 hours ON/120 hours SLEEP
  - Max Range T/T
  - 48 hours
  - Charging Temperature Range
  - 0°C ~ +40°C

www.smartsolo.com
TECHNICAL SPECIFICATIONS

Channel Performance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Input Voltage</td>
<td>&lt;2.3Vpeak at Gain 0dB</td>
</tr>
<tr>
<td>Instantaneous Dynamic Range</td>
<td>112dB at 200mV/40dB</td>
</tr>
<tr>
<td>Equivalent Noise Voltage</td>
<td>400μV RMS at 1kHz</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>&lt;0.002% at Gain 0dB</td>
</tr>
<tr>
<td>Common Mode Rejection</td>
<td>&lt;60nV</td>
</tr>
<tr>
<td>Gain Accuracy</td>
<td>±3%</td>
</tr>
<tr>
<td>GPS Time Standard</td>
<td>10ppm</td>
</tr>
<tr>
<td>Timing Accuracy</td>
<td>±0.1μs</td>
</tr>
<tr>
<td>System Dynamic Range</td>
<td>94dB</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>0 - 150Hz</td>
</tr>
</tbody>
</table>

Acquisition Performance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Frequency</td>
<td>3Hz</td>
</tr>
<tr>
<td>Spiritus Frequency</td>
<td>&gt;70Hz</td>
</tr>
<tr>
<td>Zonal Attenuation</td>
<td>-25±5dB at 1kHz, 5kHz</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>76.75/60% (0.95/50%v/v)</td>
</tr>
<tr>
<td>Remark</td>
<td>All parameters are specified &lt;25°C, in the vertical position for vertical geophone and horizontal position for horizontal geophone unless otherwise stated.</td>
</tr>
</tbody>
</table>

SmartSolo®
The Future of the Seismic Industry

Smaller crew size, less man power and simple equipment
- Lower operational cost
- Less environmental impact
- Improved HSE

Million channels capability
- High channel density
- Better image at lower cost

Super reliable, lower power consumption, longer operating time
- High productivity
- Lower operational cost

Highly efficient data harvesting and management
- Lower operational cost
- Better user experience

International Sales
Unit 145, 1901-54 Ave, NE
Calgary, AB T3J 1X9
Canada
Tel: +1-403-244 1870
TollFree: +1-866-604-0000 (QIK5)
Email: sales@smartsoolo.com

Business Development Centre
403, Building D, No.15 South of Ronghua Road,
BDA, Beijing, 100016, China
Tel: +86-10-8844-19
Fax: +86-10-8720171
Email: marketing@dttcc.com

www.smartsoolo.com

DT-SOLO
The Heart of SmartSolo

- High Quality
- High Sensitivity
- Super Reliable
- Greater Savings
- Low Distortion
- Single Point Receiver
- Industry Leader
- Available in 10 Hz & 5 Hz