C-THRUE
See Thru Concrete Structures and Reveal True Data that Lead to Optimal Decision-Making

All-in-one GPR for accurate scanning and real time analysis of concrete structures

IDS GeoRadar: The leader in multi-frequency and multi-channel Ground Penetrating Radar
www.idsgeoradar.com
C-THRUE

SEE THROUGH CONCRETE STRUCTURES AND REVEAL TRUE DATA

Construction and service companies as well as civil and structural engineers can improve the way they **locate rebars, voids, post-tension cables, cavities, conduits** and any other objects buried in the structure before cutting or drilling into the concrete.

UNIQUELY IMPROVE DECISION-MAKING

- **Dual antenna polarisation** for the optimal detection of both first and deeper levels of rebars;
- **Virtual Pad** - Built-in, automatic, and highly accurate position and navigation system;
- **Augmented Reality** for 3D data visualisation.

FEATURES AND BENEFITS

**Clearer and faster surveys:** First and deeper levels of rebars detection thanks to the system’s dual antenna polarisation.

**Fully-visible, multi-touch display:** data displayed on the screen are never obscured by the handle or the user’s hand.

**Increased data accuracy:** an automatic position and navigation system eliminates all manual, error-prone paper grids.

**Automated data acquisition & analysis:** automatic detection of the first layer of rebars and result exportation.

**Safe drill in the surveyed structure:** Improve safety before cutting or drilling into concrete with rebar/void automatic insight capabilities.

**Simplified data interpretation:** optimal decision-making supported by visualisation of acquired data in 3D models.

**Advanced data visualisation:** augmented reality for 3D data visualisation and sharing, in real time or intervals after acquisition.

**Flexibility anywhere:** lightweight, compact, drop resistant and transportable system for any user operations and construction sites.
### C-THRUE

**ALL-IN-ONE, COMPACT AND PORTABLE SYSTEM**

- Four wheel-encoders
- Three Lasers (on front, left, and right sides)
- Ergonomic handle with dead men’s switch
- Capacitive, multi-touch display (7 inches)
- Start & Stop button
- USB device
- Battery
- Wi-fi connection for real time remote control, data processing and Augmented Reality

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Antenna Center Frequency</td>
<td>2.0 GHz</td>
</tr>
<tr>
<td>Antenna Polarisation</td>
<td>Horizontal and Vertical</td>
</tr>
<tr>
<td>Number of Radar Channels</td>
<td>2 (dual-polarised antennas)</td>
</tr>
<tr>
<td>Scan Interval</td>
<td>Up to 10 scans/cm</td>
</tr>
<tr>
<td>Depth Range</td>
<td>Up to 80 cm (up to 31.5 in.)</td>
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<tr>
<td>Positioning System</td>
<td>“Virtual Pad” (based on 3 High safety - Class 1 laser sensors with reflective bars)</td>
</tr>
<tr>
<td>AC Power Conduits Detection</td>
<td>EM sensor integrated (50/60 Hz)</td>
</tr>
<tr>
<td>Connectivity</td>
<td>USB, Wi-Fi</td>
</tr>
<tr>
<td>Drop Resistant</td>
<td>COMPLIANT WITH MIL-STD-810G</td>
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</tbody>
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### MECHANICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Dimensions (Length x Width x Height)</td>
<td>285mm x 200mm x 160mm (11.2in x 8.6in x 6.3in)</td>
</tr>
<tr>
<td>Weight</td>
<td>2.4 kg (5 lb) with battery</td>
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<tr>
<td>Display</td>
<td>7.0 inches TFT multi-touch</td>
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### ACCESSORIES SPECIFICATIONS

- C-THRUE EXTERNAL CONTROLLER: Real time remote control, Data processing and representation of results in Augmented reality
- C-THRUE POLE:
  - Telescopic aluminium pole
  - 1.8 m (6ft)
  - Remote control buttons
- Positioning Kit and Telescopic Pole

![Image of the C-THRUE device with labels for the different features.]