

## C-THRUE SEE THROUGH CONCRETE STRUCTURES AND REVEAL TRUE DATA THAT LEAD TO OPTIMAL DECISION-MAKING



# **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.

#### FEATURES AND BENEFITS

- **Clearer and faster surveys:** Detection of first and deeper layers of rebars and objects in the structure 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 for easy relocation of safe areas to drill or core.
- Safe drill in the surveyed structure: Improve safety before cutting or drilling into concrete with rebar/void automatic insight capabilities.

- **Virtual Pad** Built-in, automatic, and highly accurate position and navigation system.
- Augmented Reality for 3D data visualisation.
- Safe drill in the surveyed structure: Improve safety before cutting or drilling into concrete with rebar/void automatic insight capabilities.
- Advanced data visualisation: augmented reality for 3D data visualisation and sharing, in real time or intervals after acquisition.
- **Flexibility anywhere:** lightweight, compact and transportable system for any user operations and construction sites.



Standard GPR visualisation



Automatic position and navigation system (Virtual Pad) increases productivity and reduces survey times.



C-thrue visualisation: dual antenna polarisation allows the optimal detection of both first and deeper levels of rebars



Augmented reality for real time data visualisation, supporting decisions on-site, data sharing with customers and project collaborators.

### ALL-IN-ONE, COMPACT AND PORTABLE SYSTEM Start & Stop button Multi-touch display (7 inch) Ergonomic handle USB port for 🚤 Battery data transfer and product updates Three lasers (on front, left, and right sides) Four wheel-encoders Wi-fi connection for real time Positioning kit /virtual Case remote control, data processing and pad and telescopic pole **Augmented Reality**

	TECHNICAL SPECI	FICATIONS	
Antenna center frequency	2.0 GHz	Dimensions (length x width x height)	285mm x 200mm x 160mm (11,2in x 8,6in x 6,3in)
Antenna polarisation	Horizontal and Vertical	Weight	2.4 kg (5 lb) with battery
Number of antennas	4	Display	7.0 inches TFT multi-touch
Number of radar channels	2 (dual-polarised antennas)	Data storage	32 GB
Scan interval	Up to 10 scans/cm	Battery	Li-ion, 15V, 3.2Ah, 3-hour runtime
Depth range	Up to 80 cm (up to 31.5 in.)		
Positioning system	"Virtual Pad" (based on 3 High safety - Class 1 laser sensors with reflective bars) Paper Pad	ACCESSORIES SPECIFICATIONS	
AC Power conduits detection	EM sensor integrated (50/60 Hz)	C-thrue External Controller	Real time remote control, Data processing and representation of results in Augmented reality
Connectivity	USB, Wi-Fi	C-thrue Pole	<ul> <li>Telescopic aluminium pole</li> <li>1, 8 m (6ft)</li> <li>Remote control buttons</li> </ul>
Environmental rating and IP65	Compliant with mil-std-810g		



Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE), a state where data is connected seamlessly through the convergence of the physical world with the digital, and intelligence is built-in to all processes.

Hexagon's industry-specific solutions leverage domain expertise in sensor technologies, software, and data orchestration to create Smart Digital Realities<sup>™</sup> that improve productivity and quality across manufacturing, infrastructure, safety and mobility applications.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.5bn EUR. Learn more at hexagon.com and follow us @HexagonAB.





	C-thrue
:	SYSTEM SPECIFICATIONS
Antenna Center Frequency	2.0 GHz
Number of Antennas	4
Antenna Polarisation	Horizontal and Vertical
Number of Radar Channels	2
Scan Interval	Up to 10 scans/cm
Depth Range	Up to 80 cm (up to 31.5 in.)
Display modes	B-Scan and C-scan (radar tomography)
Positioning system	"Virtual Pad" (based on 3 High safety - Class 1 laser sensors with reflective bars)
AC Power Conduits Detection	EM sensor integrated (50/60 Hz)
Battery	Li-ion battery, 15V, 3.2Ah, 3-hour runtime
Data Storage	32 GB
Connectivity	USB, Wi-Fi
ENVI	RONMENTAL SPECIFICATIONS
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Environmental	IP65
ME	CHANICAL SPECIFICATIONS
Dimensions (length x width x height)	285mm x 200mm x 160mm (11,2in x 8,6in x 6,3in)
Weight	2.4 kg (5 lb) with battery
Display	7.0 inches
	TFT multi-touch
Drop Resistant	Compliant with MIL-STD-810G
SC	DFTWARE SPECIFICATIONS
C-thrue software	Quick start-up Real time radar data acquisition, processing and visualization in B-Scan Real time feature marking, management and editing tool



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	Rebar/Void automatic discrimination	
	VirtualPad * - Positioning & navigation system	
	Visualization of C-scan (radar tomography)	
	Real time diagnose of radar and the other devices	
	Metric and imperial units	
	Available in more than 20 languages	
	First rebar layer automatic detection	
	Automatic job reports	
	Real time Power conduit sensing display	
ACCESSORIES SPECIFICATIONS		
C-thrue External Controller	Remote control of C-thrue	
C-thrue External Controller	Remote control of C-thrue Representation of results in Augmented Reality (when used with Virtual Pad)	
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C-thrue External Controller	Representation of results in Augmented Reality (when used with Virtual Pad)	
C-thrue External Controller	Representation of results in Augmented Reality (when used with Virtual Pad) Display: 10.1 inches	
C-thrue External Controller	Representation of results in Augmented Reality (when used with Virtual Pad) Display: 10.1 inches Drop resistant: 1.8 m (5.9 ft)	
C-thrue External Controller C-thrue Handle	Representation of results in Augmented Reality (when used with Virtual Pad) Display: 10.1 inches Drop resistant: 1.8 m (5.9 ft) Connectivity: 4G LTE, Wi-Fi	
	Representation of results in Augmented Reality (when used with Virtual Pad) Display: 10.1 inches Drop resistant: 1.8 m (5.9 ft) Connectivity: 4G LTE, Wi-Fi Environmental: MIL- STD 810G and IP65	
	Representation of results in Augmented Reality (when used with Virtual Pad) Display: 10.1 inches Drop resistant: 1.8 m (5.9 ft) Connectivity: 4G LTE, Wi-Fi Environmental: MIL- STD 810G and IP65 Telescopic aluminum pole	

\* Patented



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