# SERVICE SOLUTIONS



# TRAINING AND SUPPORT

- Industry leading local expertise: Software and hands-on training, both onsite and in office
- Face-to-face training: Local specialists are available across North America for support and training
- Shortened learning curve: Continued onsite support directly from a Hilti Certified Detection Trainer allows for fast ramp up and increased productivity
- Dedicated back-office support: Users have access to software and digital file support through Hilti's technical experts
- Dedicated email and phone: Users have direct access to E-Mail support at USTeameasuringSupport@hilti.com or call 972-403-2590
- Training certifications available
- Upon completion of training from Hilti Certified Detection Trainers
- Task or application specific certifications like PROFIS Detection training, rebar sizing and rebar localization

# **ORDER INFORMATION**

#### Ferroscan detection systems

Ordering designation

Ferroscan system PS 250 with Scanner PS 200 S, Tablet PSA 200, Infrared adapter (1) 3559450 PSA 65, memory card, headset, required batteries and chargers, reference grids, data cable and operating instructions packed in a Hilti case

Ferroscan kit PS 200 S with Scanner PS 200 S, Infrared adapter PSA 65, Battery pack PSA 80, mains adapter, reference grids, data cable and operating instructions packed in a Hilti case

Ferroscan PS 200 S with Scanner PS 200 S, Battery pack PSA 80, mains adapter and operating instructions packed in a Hilti case

#### X-Scan detection systems

**PS 1000 X-Scan System** with X-Scan scanner PS 1000, Tablet PSA 200, headset, 3 battery packs and 2 mains adapters, torque wrench, connecting cable for data transfer, reference grids, memory card and operating instruction packed in a wheeled Hilti case

PS 1000 X-Scan with X-Scan scanner PS 1000, (2) Battery packs PSA 81, mains adapter, reference grids, torque wrench, memory card and operating instructions packed in a Hilti case

**PS 1000-B** with X-Scan scanner PS 1000-B, battery pack, mains adapter, (5) Reference grids PSA 13, torque wrench, data module and operating instructions packed in a Hilti case

#### Transpointers

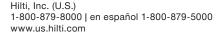
**Transpointer PX 10** with receiver, (2) hand straps, Adhesive putty PUA 91, Adhesive strips PUA 92, (2) 9 V alkaline batteries and operating instructions packed in a HIIti case

Transpointer kit PX 10 with receiver, (2) hand straps, Adhesive putty PUA 91, Adhesive strips PUA 92, (2) 9 V alkaline batteries, marker, Slope adapter PXA 70 and operating instructions packed in a Hilti case

#### **Detection accessories**

	PS 250	PS 1000		
Brush PSA 75			5	2013776
Adhesive tape PUA 90			6	319362
Marker pen set PUA 70, 12 pcs			7	340806
Ferroscan headset for voice recording with the tablet			8	305143
Tablet PSA 200 with soft case, battery pack and AC adapter			9	3559451
Reference grid PSA 11, 23.5 x 23.5 in (5 pack)			(10)	377655
Reference grid PSA 13, 23.5 x 23.5 in (5 pack)			(11)	2006084
Reference grid PSA 15, 47 x 47 in (2 pack)			(12)	2006086
Memory card PSA 95			(13)	2006184
Extension PSA 70 for Scanner PS 1000			(14)	2006199
Case for X-Scan PS 1000 system			(15)	2006201
Battery charger PUA 80 for the Battery pack PSA 80			(16)	377460
Mains adapter PUA 81 for Battery PSA 81			17	2006089
Mains adapter PUA 85 for Battery PSA 83				2149913
Car battery plug PUA 82 for Batteries PSA 81 and 82	Tablet		(18)	2006180
Car battery plug PUA 86 for Battery PSA 83	Tablet			2149916
Battery pack PSA 80 for Scanner PS 200			(19)	377472
Battery pack PSA 81 for X-Scan PS 1000			20	2006182
Battery pack PSA 83 for Tablet PSA 200	Tablet		21	2149915







Face-to-face training with a local Measuring Specialist is available across North America



On site support for technical troubleshooting specific to your application

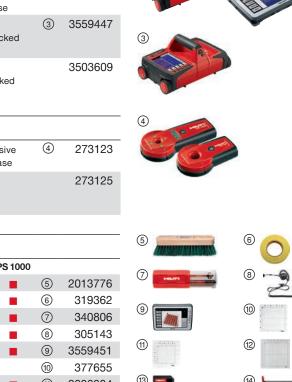


Access to Hilti's Back Office Support Team for technical troubleshooting, software training and product support



# **INNOVATIVE SOLUTIONS** FOR CONCRETE SCANNING

X-Scan PS 1000 Ferroscan PS 250



ltem no

2154101

377649





1-800-363-4458 www.hilti.ca

# PROFIS SOFTWARE



# **PROFIS DETECTION HIGHLIGHTS**

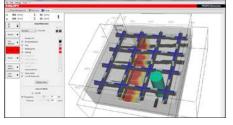
#### Analysis

- Advanced processing with comprehensive evaluation and analysis features using different migration types as well as various calculation and visualization parameters
- Fully customizable to users specifications

#### 2D/3D imaging

- Full data processing to 3D models, including 2D and 3D plan views or cross-sectional images
- EM sensor activation and overlay in 2D/3D
- 3D data export in different formats (.dxf, .dae, .ply, .x3d)

As-built checks for import into design applications such as PROFIS Layout Office, AutoCad, Revit Trimble SketchUp and many more.



3 views in 1: Easy-to-interpret radar data Seemless integration with other Hilti now enhanced with EM sensor and Ferroscan data for easy classification of embedded objects.

Capable of combining multiple scans

for visual presentation (in 2D/3D views)

Provides a clear overview of areas up

Statistical assessment and graphical

to 150 feet x 150 feet (45m x 45m)

visualization of depth of cover for

complete area or by rebar layer

#### Reporting

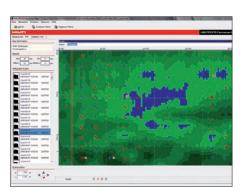
- Easy creation of documents for reporting concrete cover, rebar diameter, spacing and localization
- Ferroscan data overlay in 2D and 3D for depth calibration and material classification
- · Placement of drill holes, annotations and snapshots



PROFIS software allows real world scan data to be used.

### PROFIS FERROSCAN MAP

- Subsequent data analysis on a PC
- Collective evaluation of several individual scans with the same parameters, use of various date formats, and more
- Production of statistics and assessment reports





# REBAR AND CONCRETE COVERAGE ANALYSIS

Ferroscan **PS 250** 

# **APPLICATIONS**

- Rebar verification and analysis
- Checking concrete coverage over large areas for acceptance inspections and structural repair work

# **ADVANTAGES**

- Scans large areas of concrete quickly and easily
- Provides accurate depth of cover measurements for reinforcement at depths up to 6-1/4 inches (160mm)
- Records scan data automatically over lengths of up to 100 feet (30m)
- Displays a clear 2D/3D image of the reinforcement on the Tablet PSA 200 for on-the-spot structural analysis and depth of cover assessment



The Hilti Ferroscan PS 250 provides a non-destructive means of locating reinforcing bars and measuring their depth of concrete cover. This complete, easyto-use cordless detection system, consisting of a scanner and external Tablet PSA 200 can also estimate the diameter of detected rebar. Employing the induction principle, the scanner locates rebars accurately and reliably within concrete structures. The results of scans are displayed on the Tablet PSA 200 as easily interpretable 2D/3D images. Scan data is recorded and can be transferred to a PC for further analysis, creation of assessment reports and for archival purposes.



### **Fechnical data**

Detection range	max. 6-1/4" (160 mm)			
Localization accuracy	± 1/8" (± 3 mm)			
Depth measurement accuracy	± 3/64 " (± 1 mm)			
IP protection class	IP 54 as per IEC 529 std			
Operating temperature range	14 to 122°F (-10 to + 50°C)			
Battery life, scanner / tablet	8 h NiMH / 5 h Li-Ion			
Dimensions / weight, scanner	10.2 x 5.2 x 5.2 in/3 lbs			
Dimensions / weight, tablet	11.5 x 8.2 x 2.6 in/5 lbs			
We reserve the right to make technical changes. Performance varies with base material condition and				

application -- see operating instructions for details.



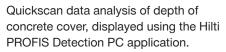
# QUICKSCAN DETECTION

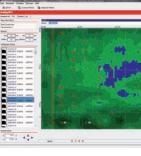
• Quickly measures the depth of cover over reinforcing bars located at depths of up to 4" (100 mm), allowing their positions to be • Records and evaluates the data marked directly on the concrete surface

# QUICKSCAN RECORDING

- Scans long stretches of up to 100' (30 m) in length, quickly and easily
- automatically while indicating the average depth of cover, the number of bars found and the standard deviation • Multiple Quickscans can be combined for large-area analysis using the PC

application





Ferroscan MAP combines multiple scans a large-area view showing where depth of cover is inadequate (with statistics).

#### Great services – the choice is yours.

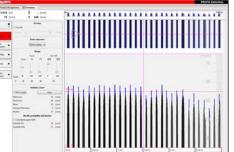


ool upgrade Endless wear & tear Theft coverage



 20 year limited warranty 2 year wear & tear I day turnaround guaranteed





# SEE FOR YOURSELF, WITH **REAL INSIDE INSIGHT**

### **X-Scan PS 1000**



# **IMAGESCAN**

- Scans large areas of concrete in a grid pattern
- Locates rebars at depths of up to 6-1/4" (160 mm)
- Produces clear, easily interpretable 2D and 3D images of the layout, for measurement of depth of concrete cover and for estimation of rebar diameter
- Multiple Imagescans can be combined for large-area analysis using the PC application



## QUICKSCAN DETECTION

- Quickly locates various objects in concrete, allowing their positions to be marked directly on the working surface with an easy to read data visualization in top view and cross-sectional view
- Quickscan Detection Expert mode with increased detection depth of up to 18" (450 mm) and more in raw data view (A-Scan and B-Scan view)
- Base material layer thickness detection



## QUICKSCAN RECORDING

- Scans stretches of up to 100' (30 m) in length, guickly and easily
- Shows objects in 2D or 3D plan views and cross-sectional views
- Handy extension available for easy and convenient floor scanning

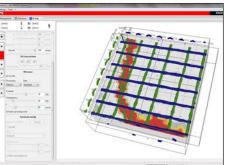


# IMAGESCAN

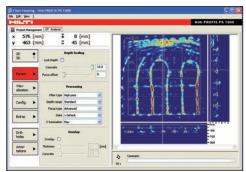
- Scans large areas of concrete in a grid pattern
- · Locates metal and plastic pipes as well as electric cables and conduits at depths of of up to 12" (300 mm) in dry concrete
- EM sensor data visualization for easy live electrical conduit detection
- Shows objects in a 2D or 3D plan view and cross-sectional view for immediate analysis

### THE TWO SYSTEMS COMPARED

System PS 250	Features and Benefits	X-Scan System PS 1000
•	Locating reinforcing bars	•
	Locating pre- and post-tensioning tendons	
	Locating cavities	•
	Locating plastic pipes and electric cables	
	Measuring depth of concrete cover	
	Determining rebar diameter	
	Detecting objects in multiple layers	•
	Estimating wall and slab thickness	
	Import to PROFIS Anchors	•
	Import to 3D model software, e.g. AutoCAD, SketchUp	



2D and 3D representation of an Imagescan Advanced software with comprehensive shown as a plan view and cross-sectional views on PROFIS Detection software.



evaluation and analysis features for the creation of reports and documentation

The Hilti X-Scan PS 1000 can detect reinforcing bars, pre- and post-tensioning cables, metal pipes, plastic pipes, electric cables and glass-fiber cables in next to no time - even over large concrete areas. Scan results are presented on the X-Scan display for immediate analysis or can be transferred to the Tablet PSA 200 for further evaluation. Thanks to its ease of operation, on-site handling and the easily interpretable **3D images** of concealed objects it produces, the Hilti X-Scan PS 1000 takes **non-destructive structural inspection** into a new era.



### Performance data

Maximum detection range	up to 12 in (300 mm); PS 1000: up to 18 in (450 mm) in RAW Data view
Localization accuracy	± 7/16 in (± 10 mm)
Depth measurement accuracy	± 7/16 in (± 10 mm)
IP protection class	IP 54 as per IEC 529 std
Operating temperature range	14 to 122°F (-10 to + 50°C)
Battery life, scanner / tablet	4 h / 5 h with Li-ion battery pack
Dimensions / weight, scanner	12.5 x 7.5 x 5.6 in/5.5 lbs
Dimensions / weight, tablet	11.5 x 8.2 x 2.6 in/5 lbs
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We reserve the right to make technical changes. Performance varies with base material condition and application -- see operating instructions for details.

# **APPLICATIONS**

- Non-destructive inspection and detection of concealed objects in steelreinforced and pre-stressed concrete structures
- Detecting metal or plastic pipes and electric cables to help avoid damage when drilling
- Locating rebars for post-installed rebar connections

### **ADVANTAGES**

- Locates objects of various kinds in concrete structures, even beneath reinforcing mesh
- Displays a clear, real-time 2D image directly on the Hilti PS 1000 display
- Displays 2D and 3D plan view or cross sectional images in color on the Tablet PSA 200 for further on-the-spot evaluation of the data or printing

