

DALIAN TAIJIA TECHNOLOGY CO.,LTD

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Civil Engineering

Non-Destructive Construction Testing Equipment



ZBL-C310A is a specialized apparatus; it is designed according to the electrochemical testing method (natural potential method) of "construction testing technical standard". Using the electrode polarization theory,

ZBL-C310A tests the potential of concrete surfaces by a Cu/CuSO4 reference electrode, and determines the level of rebar corrosion with commonly used natural potential method.

- The degree electrodes detected show in a hierarchical graph
- Data be stored in a usb-thumb drive, convenient for field work
- Two working modes of single and double electrode

Rebar rust detector	ZBL-	C310A
Corrosion detection method	Single electrode	Double electrode
Measuring Range	±1000(mV)	0-1000 (mV)
Accuracy(mV)	±0.1	±0.1
Tested points Interval X	0~100 Adjustable	20 Fixed
Tested points Interval Y	0~100 Adjustable	0~100 Adjustable
Display	160mm*128mm LCD	
Electrode Size	Φ30*180	
Power	Built-in lith	nium battery
Data Storage	234 points	



Specification



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Control mode		A8 Embedded platform
Data storage		≥4GB
Operation mode		Key + touch screen
Sentinel magnify(time)		1,2,5,10,20,50,100 adjustable
A/D resoulution(bit)		True 24 bits A/D
Sampling time intervals(µS)		1~64000 adjustable
Max length of sampling		4096
Trigger		Signal trigger
Noise voltage of the system(m)	/)	≤1
Dynarnic range(dB)		≥184
Amplifier frequency range(Hz)		10~10K
Time value error		4096
Time resolving power(us)		≤10%
Gain error(dB)		≤1%
Work time(h)		>8
Number of channels		2
Interference between the chan	nels	≤1%
Transducer/probe sensitivity (Acceleration mode) (mv/g)		≥100
Frequency range of Probe (Acceleration probe) (Hz)		0.5~9000
Port		Double USB
Wi-fi		Yes
	Internal	Built-in battery
Power	External	220VAC/DC
Operational environment	Temperature(℃)	-10~+50
Operational e nvironment	Humidity (RH)	<90%

Rebar detector		ZBL-R800	ZBL-R630A	ZBL-R630	ZBL-R620
Application			Bridge; tunnel	; building etc	
Rebar location		√	√	√	√
Rebar cover measure	ement	√	√	√	√
Rebar diameter estin	nation	√	√	√	√
Rebar corrosion estir	mation	√			
Protective layer thick	kness range (mm)	Ф6-Ф50	Φ6-Φ50	Φ6-Φ50	Φ6-Φ50
N	First range	3~98	3~98	6~90	6~90
Max range(mm)	Second range	3~196	3~196	10~180	10~180
Maximum allowed	±1(mm)	3~77	3~77	6~79	6~79
error of protective layer thickness	±2(mm)	78~120	78~120	60~119	60~119
range (mm)	±4(mm)	121~196	121~196	70~180	70~180
Application range(m	m)	Φ6-Φ50	Φ6-Φ50	Φ6-Φ32	Φ6-Φ32
Data transfer		U-Disk	U-Disk	USB	USB
Wireless transfer		√	√		
Data correction		AUTOMATIC	AUTOMATIC	Manually	
Power		Built-in chargeable lithium battery > 38 hours	Built-in chargeable lithium battery >38 hours	Built-in Battery	DC:9V battery
Size(mm)		212×134×150	212×134×150	190×135×52	190×135×52







The ZBL- U5100 / U5200 is a tool for ultrasound investigations of new generation that allows you to perform different types of tests on concrete structures and on foundation piles through the Cross-Hole methodology.



Technical Specification

Applications Structural concrete compressive strength, crack depth and defect detection

- Ultrasonic transmission method for rapid detection of pile foundation, continuous wall integrity
- Geological prospecting, rock integrity, weathering evaluation test
- Rock, concrete and other non- metallic materials mechanical properties testing

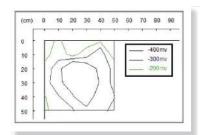
Features

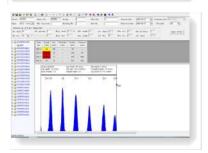
- Cross-Hole 2 or 3 channels, manual
- Measure the concrete resistance (25/50KHz)
- Localization and Mapping of defects inside the concrete component
- Measuring the depth of the crack

reclinical Spec	incation			
Item		U5100	U5200	
Control mode		Built-in AB industrial control board		
Monitor		5.7 inch, semi inverse semi penetration, TFT		
Operating mo	de	Touch scre	en & Keys	
Data storage		Built in electronic ha	d disk(≥4GB)+U disk	
Acquisition m	ode	Single channel manual point by point acquistion	Single and double channel manual point by point acquisition	
Number of ch	annels	1 emitter+1 receiver	1 emitter+2 receiver	
Trigger		Signal		
Sampling interval(µS)		0.025~1638.4 optional multiple levels		
Acoustic time accuracy(µS)		0.025		
Acoustic time range(µS)		±1677700		
Dynamic range(dB)		154		
Bandwidth(kHz)		3~450		
Receiving sen	sitivity(µV)	≤10		
Gain accuracy	(dB)	0.5		
Transmitting	voltage(V)	65, 250,500,1000 optional four levels		
Port		USB, MiniUsb, Wi-Fi, Bluetooth		
Work time(h)		≥5		
Power		Built-in Lithium Battery		
External		220VAC/DC		
Operational	Temperature(°C)	-10°C~+40°C		
environment	Humidit(RH)	<90%		

ZBL-R800 Multi-Functional **Rebar Detector**

ZBL-R800 is a multi-functional integrated rebar detector which can be used for testing the thickness of protective layers, measuring the diameter, location, and distribution of rebar as well as for detecting the corrosion content of a rebar.







Applications

- Locate rebars before drilling, cutting and coring
- · Conformity check of new buildings
- Spot check of cover and rebar size
- Corrosion analysis
- Evaluating the quality of construction
- · Testing the quantity of rebar when evaluating and developing the old structure
- Evaluating the integrity and durability of existing structures

Features

- Double function of rebar and corrosion test.
- Localization and distribution of rebar
- Measure the thickness of rebar cover
- Estimation of the rebar diameter
- · Graphic reconstruction of the grid
- Display the rebars in section for assessing the deviation from the known rebar cover to each bar or stirrup
- Measurement of the potential corrosion of steel with single or dual electrode allowing the diagnosis of the state of corrosion







Standard Delivery

- Carrying Case
- ZBL-R800 Detector
- SET200A Rebar Sensor
- SET180C Rebar Sensor

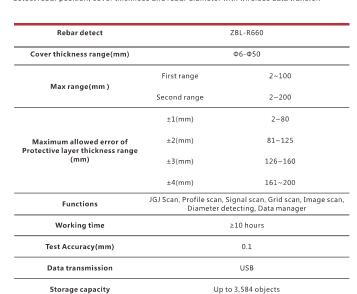
- Battery Charger
- Electrode Cap
- Signal Wire Single-electrode Wire
- Double-electrode Wire
- Double-electrode handle
 USB drives with Software for analysis and reporting





ZBL-R660 Integrated Rebar Scanner

Integrated Rebar Scanner, high accurate detect reinforcement in concrete structure. Quickly detect rebar position, cover thickness and rebar diameter with wireless data transfer.





- With multi-coli technology, rebar position can be real-time and accurate located
- Up to 65mm for profile and grid scan modes and up to 10m for signal scan
- Two data view modes: graph and list, which enables convenient and flexible operation as well as quick view of data
- Five scan modes suitable for different measuring environment



Probe

Power

Three dimensional imaging; All information with the screen display



Integrate

Built-in Battery

Scans large areas quickly and easily, Simple operation



Support round steel, deformed steel bar



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Schmidt **Rebound Hammer**

Schmidt rebound hammer is classic measuring method, non-destructive test the compressive strength of concrete construction.





HT-225W/ HT-225W+

HT-225Q

Model	HT-225	HT-225Q	HT-225W/HT-225W+
	Mechanical hammer	Digital hammer	Digital voice report hammer
Standard impact energy		2.207J (0.225Kgf.m)	
Static friction of pointer slider		0.65N±0.15N	
Length of spring stretch		75±0.3mm	
Average rebound hammer on steel anvil Rm	80±2		
Measuring range	10~60Mpa		
Communication interface	USB 2.0		USB 2.0
Real time voice report result			√
Data print out			√
Power Supply		Built-in rechargeable Lthium battery	HT-225W built-in Ithium batteryHT-225W+ removable lithium battery
Data storage capacity		<200	200 standard components (99 testing areas per component), 0special measuring curves
Display		128X64 resolution,3 levels of backlighting adjustable	16bit True colors, 176 x 220 resolution, 5 levels of backlighting adjustable.
Working humidity	≤90%RH		
Working temperature	10℃~ +50℃		

ZBL-R630A Rebar Locator







ZBL-R630A is used to test the location of rebar in concrete, the thickness of the protective layer, and the diameter, orientation and distribution of rebar by using an electromagnetic induction method. It also can be used to test the distribution of magnetic and conductor such as cables and metal pipes in non-magnetic medium and non-conducting medium.





Features

- Dual probe configuration, fully adapt to large area fast scan, complex components and small component testing needs
- Multi-parameter bar detection sensor to ensure accurate and reliable data
- Dust and waterproof design
- Data can be stored on USB drive, great for field work
- Powerful professional analysis-process software allows for the automatic generation of test reports

Standard Delivery

Carrying Case ZBL-R630A Detector

SET200A Rebar Sensor SET180C Rebar Sensor Battery Charger Signal Wire

Pencil USB drives with Software



Features

- Economical type
- Simple to learn and easy to use
- USB port
- Rechargeable lithium battery
- Test data automatically stored, and site analysis results
- Three- wheel scanning system to ensure accurate data
 Borderless profile, grid scan mode, automatic measurement of rebar spacing, real-time display of steel distribution
- Single probe directly detects the diameter of the reinforcement and the thickness of the protective layer

Standard Delivery			
	ZBL-R630	ZBL-R620	
Main Unit	√	√	
SET180A sensor	√	\checkmark	
STR128A scan car	√		
Wire of sensor	√	√	
Wire of scan car	√		
Product CD	√	√	
Pencil	√	√	
Tape measure	√	√	

ZBL-P8000 **Wireless Pile Integrity Tester**







Features

- Intelligent sensor can complete the acquisition work by himself, and upload the data to the computer through the WIFI, get rid of signal wire entanglement, efficient, fast and smooth;
- Wide dynamic range, low noise amplifier system, 24 bit A/D sampling; signal has good stability, so the defect and pile bottom can be identified easily
- The real-time analysis of detected waves, a new wave let analysis in complex situations can be more accurate to judge pile integrity;
- . Gain Value can be adjusted according to length of pile, condition of pile top surface

Technical Specification

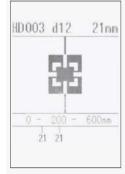
Parameter	Specification	
Amplifier frequency band	1-10K(Hz)	
A/D resolution	24 bit A/D	
Sampling time intervals	6.4µs∼1638.4µs	
Maximum Length of sampling	≥2048	
Amplitude nonlinear degree	≤10%	
Dynamic range	≥144(dB)	
Error of tome indication	≤1%	
Gain error	≤1dB%	
Transducer sensitivity	≥100mV/g(Acceleration Mode)	
Amplifier frequency range	0.5~9000Hz	
Battery operating time	>5hours	
Power	Lithium battery	
Fixed point magnification	1,2,4,8,16,32,64	
Controller	PDA With sunlight viewable touch screen display	
Data storage	Yes	

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TEM-620XH **Rebar Scanner**

Model	TEM-620XH Re	bar scanner
Diameter Measuring Range(mm)	φ6~φ	50
Measuring Range (mm)	5~10	00
	5~40	±1
	41~60	±2
Thickness Measuring Accuracy(mm)	61~80	±4
	81~90	±5
	91~100	±6
Diameter Measuring Modes	ν	/
JGJ Measurement	V	/
Data Storage	USB tra	ansfer
Off Time	V	/
Working Temperature	-10°C~	-42°C













- Testing the location, distribution, direction, and diameter of the rebar and the thickness of cover in concrete structure projects.
- . Inspecting and accepting concrete structural construction
- Evaluating the quality of construction.
- Establishing the location of rebar before drilling, cutting and coring operations.
- Testing the distribution and direction of electric cables, pipelines and metalwork inside walls and floors.
- Testing the quantity of rebar when evaluating and developing the old structure, such as installation of furniture and air-condition.

MD120 Wall scanner



	Multi-functional Wall Detector	
	Magnetic Metal	120mm
Maximum	Non-Magnetic Metal	80mm
Probing Depth	Charged wire 110-230voltes(in the pass through)	50mm
	Wood	38mm
Switch off instr	ument with inactivity	After 5 mins
Operation Temperature		-10°C~50°C
Storage Temperature		-20°C~70°C
Battery Type		1×9 Volts 6LR61
Operation Time		About 5 hours
Protection Clas	SS .	IP54

Max probing depth of 120mm Multi-Detection Mode: Detect Metal, Wood, Charged Wire Buzzer Indication: Adjustable buzzer alarm/silent mode

LCD Display Illumination: Allows for viewing measurements in the sunny/dark conditions







Package List

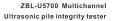
User Manual Wall Detector (Battery not included) Hand Strap Retail Box



BJLF-1 Crack integrated detector

It is mainly used for crack width and crack depth measurement of bridges, tunnels, buildings, roads and so on.





This instrument is specifically designed for testing piles foundation integrity by using the acoustic wave transmission method integrated with the unique multi-channel selfemission / self-receiving function



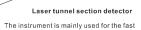
TEM-R62 concrete resistivity tester

Adopt Wenner sensor array (50 mm of spacing) to test concrete



Concrete Drilling Machine

Multi- types of drilling machine, usd in gasonline; concrete; asphalt pavement etc

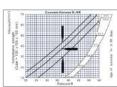


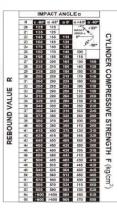
and precise detection of tunnel section, especially for construction monitoring, completion and acceptance, quality control and so on











The concrete rebound hammer are the most widely used portable NDT measuring instruments for a rapid assessment of the condition of a concrete structure.

Specification	
Measuring range	10 - 60MPa
Impact energy	2.207±0.1J(0.225Kgf.m)
Length of spring stretch	75±0.3mm
The static friction of pointer slider	0.65N~0.15N
Radius of spherical tip	25mm±1mm
The average rebound values on steel anvil	80±2
Material of the body	Aluminum
Working humidity	≤ 90%RH
Working temperature	-10 °C~+50 °C





Features:

Accurate ,reliable and manufacture-calibrated

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- Easy-to-use for fast and reliable strength
- Durable aluminum housing
- Meets requirements of JGJ/ T 23-2001 China and other standard test methods.

Application

- Uniformity testing of concret
- Compressive atraneth estimation t
- Screening of concrete to identify coring leactions
- In-city rock testing on massive rock
- Normal concrete strength estimation





Standard Accessories

- Concrete rebound hamn
- Crindatan
- Sprin
- Screwdriv
- User manua
- Aluminum carrying case



Optional Accessories:

- Test hammer calibration anv
- Digital carbonation depth gauge

ZC3 Concrete

Rebound Hammer

ZC3-A Concrete Rebound Hammer

Concrete rebound hammer is classic measurig method ,non-destructive test the compressive strength of concrete construction.



Specification	
Measuring Range	10~60Mpa
Impact energy	2.207±0.1J(0.225Kgf.m)
Length of pointer	20.0± 0.2(mm)
Friction force of pointer	0.65± 0.15(N)
Spherical radius of bounce rod end	25± 1.0(mm)
Stiffness of bounce tension spring	785.0± 40.0(N/m)
Impact length of bounce hammer	75± 0.3
Fixed value of steel anvil	80± 2
Working length of bounce tension spring	61. 5.0± 0.3(mm)







Standard Delivery

- 1. Concrete rebound hammer
- 2. Grindstone
- 3. Spring4. Screwdriver
- 5. Carrying case





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Standard Accessiories

- 1. Concrete rebound hammer

- 4. Carrying case

Optional Accessiories

- 1. Spring
 2. Screwdriver









Concrete rebound hammer generally applied to building components, bridges and all kinds of concrete components (panels, beams, columns, bridges).

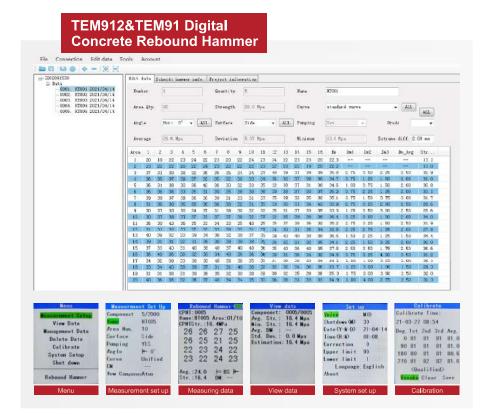
Specification	
Impact energy	2.207 J
Pointer length	20.0 ± 0. 2mm
Friction of pointer	0.65 ± 0. 15N
Spherical radius of bouncing rod	25±1.0mm
Elastic tension spring stiffness	785.0 ± 30. 0N/m
Impact length of bounce hammer	75±0.3mm
Bounce hammer take-off position	Scale "0"
Calibration value on steel anvil	80 ± 2

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TEM912&TEM91 Digital Concrete Rebound Hammer



Specification	
Impact energy	2.207J
Error range for digital displayer	≤±1 (the difference between displayer and scale)
Average rebound hammer on steel anvil Rm	80±2
Display	2.0inch (220×176 pixels)
Language	English
Memory	2000 pcs
Tum off	Automatic turn off without operation
Power supply	3.7V Lithium battery, 1050 mA.
Port	USB (update type Bluetooth)
Size(mm)	150×62×39



Standard Delivery

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Model Accessories	TEM912	TEM91
Main Unit	√	√
USB Cable	√	√
Power Adapter	√	√
CD-ROM Software	√	√
Springs	√	√
Screwdriver	√	√
Millstone	√	√
Carrying case	35*8*12cm	37*30*15cm
Operation Manual	√	√
Bluetooth printer	_	√
Thermal Paper	_	√

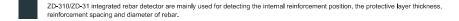
PIONEERING AND INNOVATION

ZD-310/ZD-31 Integrated Rebar Locator





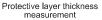




Model		ZD-31	ZD-310
Protective layer thickness range(mm)	Φ6~Φ50		
Measuring range(mm)	First range	1~90	
	Second range	Second range 5∼185	
Maximum allowed error of protective layer thickness range(mm)	±1	1~70	
	±2	60~100	
	±4	80~185	
Diameter Measurement Accuracy	±1		
Scanning mode		Thickness mode, grid mode, profile mode, waveform mode, JGJ inspection	Thickness mode (protective layer thickness, spacing, diameter), JGJ detection
JGJ testing	Achieve single point 1-6 measurements,		
	automatically calculate the average		
Data Transmission	USB		
Display resolution	2.8-inch high-resolution LCD screen (320×240 pixels)		
Power supply	Built in high capacity lithium battery		
Set shutdown time	5min、10 min、15 min、30 min、60 min、90 min		
With error correction	-3.0~+3.0 (±0.5\ ±1.0\ ±1.5\ ±2.0\ ±2.5\ ±3.0)		
Operating temperature	-10 C ~+42 C		

ZD-310/ZD-31 Integrated Rebar Detector Conview Follow Multiple Stop Mul







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Profile detection



Wave scan

Features

- 1.Location and orientation of reinforcing bars
- 2.Measuring concrete cover depth
- 3.Estimationof rebar diameter
- 3.Compact, user-friendly indicating device with backlight
- 4.USB connecting with PC for fast data transfer and analyze





ZD-410/ZD-41 Concrete Thickness Gauge



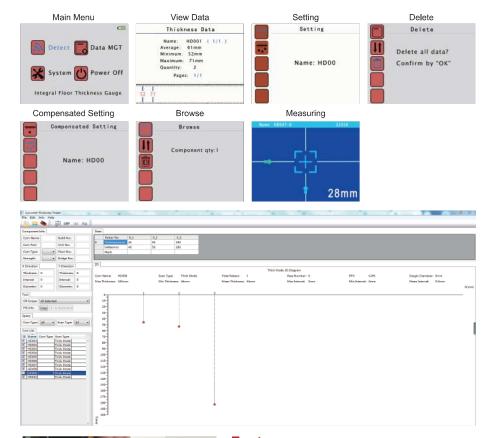


ZD-410/ZD-41 integrated floor thickness gauge is mainly used for non-destructive testing of concrete structures or other non-ferromagnetic media thickness measurements, such as: measurement of non-ferromagnetic thickness measurement of cast-in-situ slabs, walls, beams, columns, wood and ceramics; The unique design method of combining the probe and the main unit is as simple as testing the corresponding surface of the transmitting probe (floor, etc.) and measuring the non-ferromagnetic thickness value

Model		ZD41	ZD410
Test thickness range (mm)		20~999	20~450
Measurement mode		Ordinary thickness inspection	Ordinary thickness inspection
		Compensated thickness detection	
	20-200	±1	±1
	201-400	±2	±2
Testing accuracy (mm)	201-450	±Ζ	
	401-600	±3	
	601-999	≥±6	
Data storage		200000 measuring points	
Display resolution		320×240	
Data Communication		USB	
Power supply time	Main Unit	>26h	
	Probe	>64h	
Main Unit	Volume (mm)	219×92×106	
	Weight (g)	700	
Launch probe	Volume (mm)	Ø100×110	
	Weight (g)	500	
Telescopic rod	Volume (mm)	Ø28×470 (1.5m) +0.5m	
	Weight (g)	400	



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Features

- 1. High sensitivity receiving system and mini receiver probe.
- 2. Double-sided measuring the thickness of tested board, no need coupling agent.
- 3.Testing results are accurate, testing method is simple and convenient.
- 4.Real-time display of test values
- 5.Original data is saved automatically
- 6.USB port easy connect to the PC for analyzing data.
- 7.Extension bar &multi-directional probe.
- 8. Professional analysis software.
- 9.Rechargeable lithium battery ,Long Standby Time.

Stangard Delivery

- Main unit
- Extension rod

Charger

- Probe
- CD software
- USB probe
- User manual
- · Wireless interphones
- Carrying case

The CK-102 crack width detector combines smart crack detection and measurement with a close focus camera to immediately measure and document crack widths in a construction project.

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Standard Delivery

1.Main unit

4.Aluminum carrying case

2.Probe

5.Cable for probe

3.Charger

6.Blowing balloon





Specifications Range-range 0-6mm 0.01mm Accuracy Magnification 40 times / 20 times / 13 times / 10 times(optional) Formals-formals BMP format, 24 bit color / 320* 240 Memory 3000 photos (SD Card Extension) Interface Lithium Battery Standby time 18 hours Temperature-temperature -20 ~ 60 ° C Transmission-transmission USB

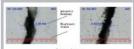
Applications

CK-102 crack width detector used onsite to record crack width measurements and to take measurements in hard to reach areas with an extension arm.

Feature

- The crack width value was shown automatically.
- Touch the screen to take photos in real time.
- Images and data can be downloaded to PC
- Images can be saved to SD-card directly
- The images will show the width &scales& zoom factor&number of the crack





Applications

• Estimation of the likelihood of corrosion

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- Indication of corrosion rate
- Correlation to chloride permeability
- On site assessment of curing efficiency
- Correlation to water permeability of rock

Standard Delivery

1.Carrying Case

4.Signal Cable

2.Main Unit

5.USB Cable

6.CD software

3.Sensor

7.User Manual





TEM-R62 Concrete Resistivity Tester

The TEM-R62 concrete resistivity tester is a fully integrated 4-point Wenner probe, designed to measure the electrical resistivity of concrete in a completely non-destructive test.



Specifications	
Measuring range	0~300 kΩcm; 0~3000 kΩcm;
Accuracy	±1 kΩcm
Resolution	0.1 kΩcm
LCD display	160*128
Power supply	6pcs 4*1.5V AA batteries