

Digital conductivity instrument



1, Product overview:

PZ 60A series portable digital eddy current conductivity meter, is our company launched patent products, technical performance of domestic leading, can replace similar foreign products, the application of eddy current digital phase detection method design. It can be used to check the conductivity, classification and classification of non-ferromagnetic metals. Widely used in metallurgy, machinery, electric power and electrician, aviation, aerospace, nuclear industry, military industry and other industrial sectors.

2, application are:

- 1) . Test the electrical conductivity and resistivity value of non-ferrous metal materials
- 2) . Check heat treatment status during production and detect overheating damage under service conditions (e. g. aircraft)
- 3), Grade of testing material
- 4) , Metal classification
- 5) Check the density of the powder metallurgy parts

3. Instrument characteristics

- 1), Beautiful in shape, easy to carry and hold. Easy and easy to use.
- 2), Large screen, large font. Test results, test frequency, temperature,

temperature coefficient and other important parameters can be displayed at the same time.

- 3) With backlighting design to facilitate the reading of detection data in low light conditions.
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- 5) Unique temperature coefficient setting and automatic calibration mode design, make the instrument operation more concise and reliable.
- 6) The instrument has excellent lifting compensation and temperature compensation design to ensure the accuracy of measurement.
- 7) The detection probe is interchangeable, and users can replace the probe provided by our company without matching.
- 8), Built-in data memory, can record 500 sets of test data and important test parameters.
- 9) . Two units of measurement (M S/m or%IACS) are easy to choose, and the resistivity value can be directly switched over at the measurement interface.
- 10) Three language choices: Simplified Chinese, Traditional Chinese, and English.

4, technical parameter; technical parameters:

service frequency	The 60 KHz sine wave of the No		
Range of electrical	7.76% IACS to 110%IACS,4.5MS/m to 64 M S/m or with a resistivity of 1.560 to		
conductivity	22.22 Ω cm		
measurement			

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resolution ratio	0.01%IACS (when less than 51%IACS);			
	0.1%IACS (51%IACS to 110%IACS range)			
survey accuracy	$\pm~0.5\%$ (temperature at 20°C); $\pm~1\%$ (temperature at 0°C ~40°C)			
提离效应	Probe compensation is 0.5 mm			
thermometry	0°C ~+50°C (0.5°C)			
Automatic	The conductivity measurements were automatically corrected to 20°C values			
compensation				
function				
Normal working	Temperature 0° C ~ + 50°C, relative humidity 0~95%			
environment				
show	Large-screen LCD, with a backlight			
	The screen displays multiple important parameters simultaneously			
supply electricity	With a 2,500 m A / h lithium-ion battery			
probe	With ⊄ 14 mm diameter operating frequency 60 KHz probe.			
Read memory	You can save 500 sets of measurement data			
Host weight	0.5KG (including battery)			
Host size	220 mm×95 mm×55 mm			
Instrument shell	High impact resistant, waterproof shower engineering plastic shell			
Packaging and	High impact resistance, portable suitcase, equipped with instrument, probe,			
protection	operation manual, conductivity mark block, charger			
appendix	Standard conductivity test block, random 2 blocks			

5. Product components:

- 1 Conductor host
- 2 Detection probe
- 3 Detection probe interface
- 4 Charger interface
- 5 Special charger for lithium-ion battery
- 6 Standard conductivity test blocks
- 7 Lithium—ion rechargeable battery (installed in the battery compartment)
 - 8 Hand protective box

9 manual of operation

Appendix 1: Reference table for electrical conductivity value and temperature coefficient of common materials

metal	Conductivity (20°C)		Temperature coefficient
	%IACS	MS/m	(reference value)
			(20℃)
cuprum	100	58	0.0038
aluminum	61	35.4	0.0040
aurum	70.7	41	0.0034
argent	108	62.5	0.0038
brassiness	25	14.5	0.0020
aluminium bronze	9	5.2	
Ti	3.6	2.08	
plumbum	7.8	4.5	0.0039
Zn	30	17.4	0.0037
Ni	22	12.8	0.0060
Mg	38	22	0.0040
average value			0.0026