

MS7500

The contact resistance measurement system Operation manual



Manufacturer: Factk Ltd.

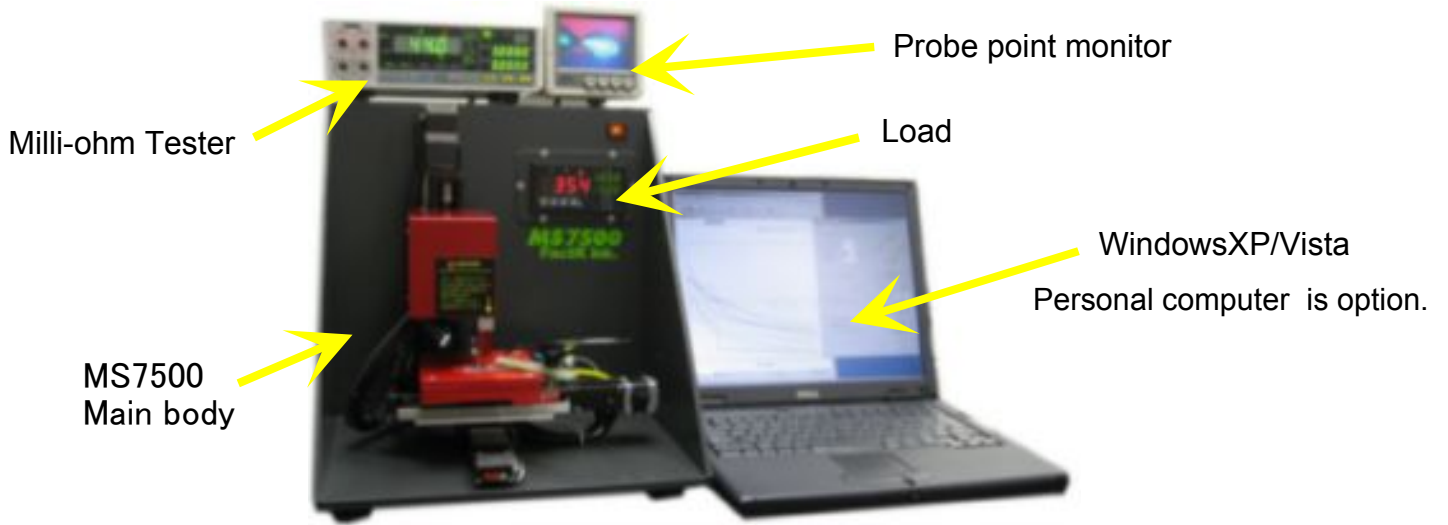
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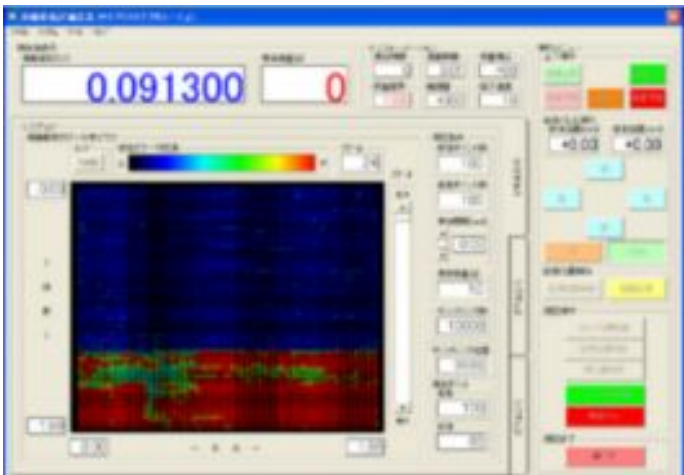
Email Address: info@factk.jp

Homepage Address: <http://www.factk.jp>

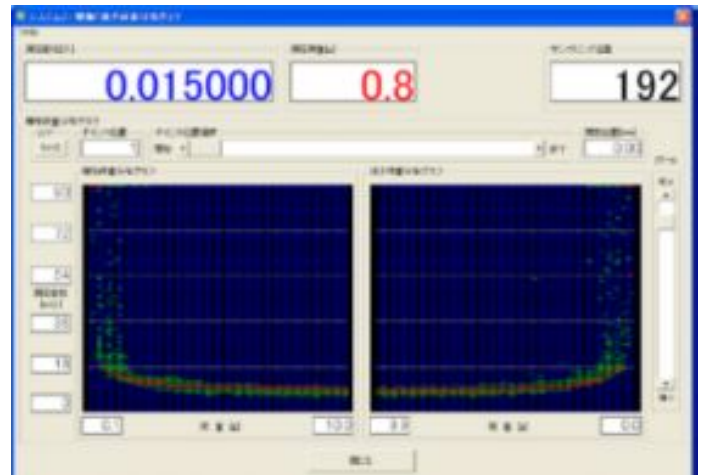
system configuration



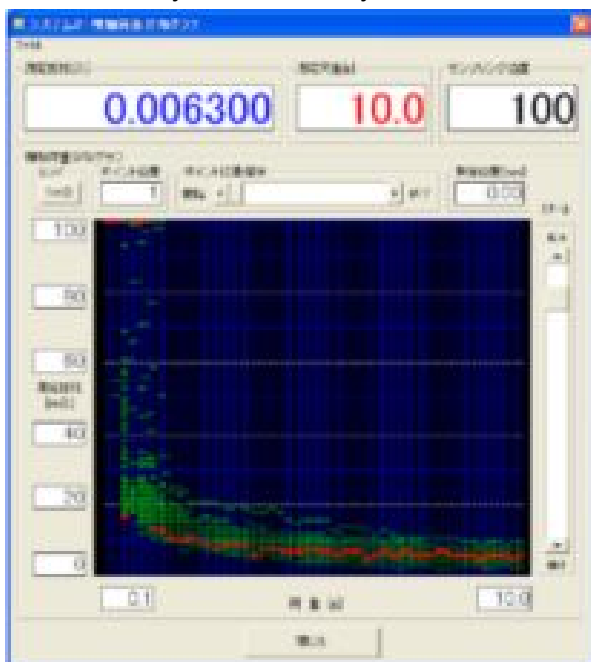
System-1
resistivity distribution by constant load



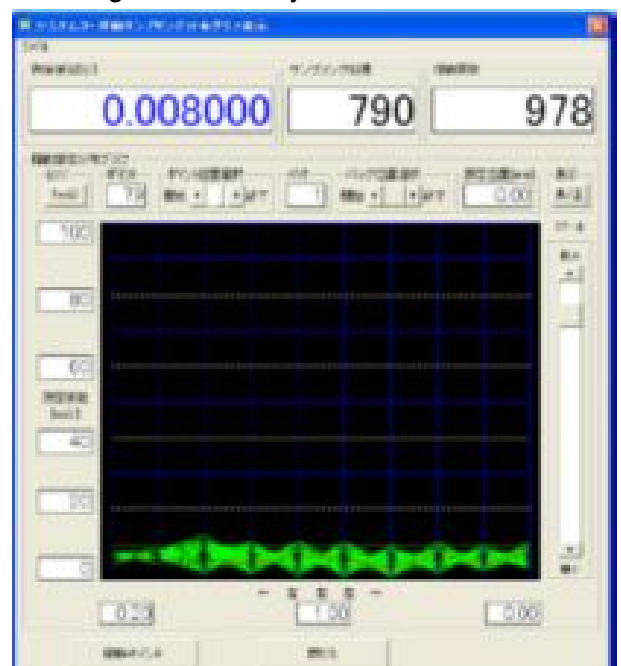
System-2
resistivity distribution by load increase and decrease



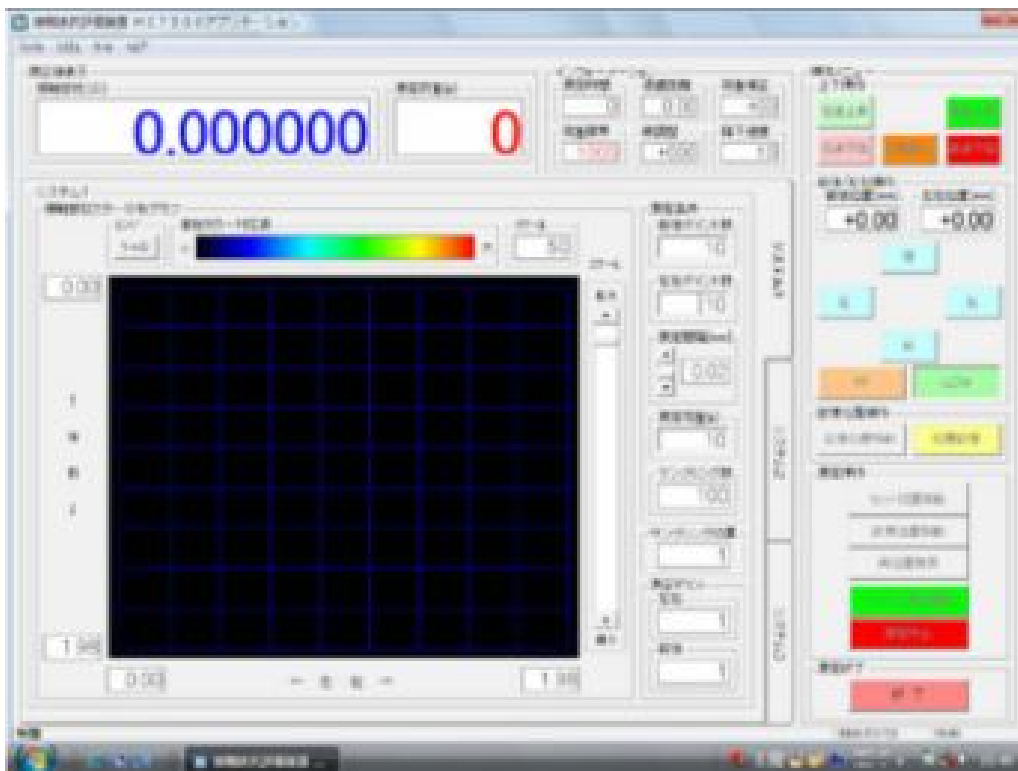
System-2
resistivity distribution by load a increase



System-3
Sliding resistance by load increase

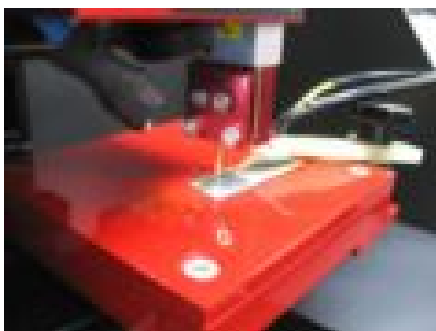


After it easily sets it , all parameters like the number of sampling , load , movement etc. are possible the automatic measurement from Windows.



■ Probe for load side measurement

The probe of various shape and the material can be installed.



■ Probe for fixed side measurement

It corresponds to the narrow contact side that can not be done with solder.



6 Ranges of 35 mΩ to 3.5 k-Ohm

Measurement current :
7.4 mA ~ 1.5 μA



Milli-ohm Tester Specification

(Alternating current 4-terminal method measurement)

- Measurement ranges : 30mΩ 300mΩ 3Ω 30Ω 300Ω 3kΩ
- Resolution : 10μΩ 100μΩ 1mΩ 10mΩ 100mΩ 1Ω
- Measurement current : 7.4mA 1mA 100μA 10μA 5μA 1.5μA
- Measurement precision : ± (0.5% of rdg. +6digit)
[At FAST] ±0.5%rdg. ±8dgt. (30mΩ) , ±0.5%rdg. ±6dgt. (Others)
However, the display count decreases to four digits.
- Measurement Hertz : 1kHz±0.2Hz (Alternating current 10kHz±200Hz Option)
- Voltage measurement ranges : DC5/50V, Minimum resolving power:100μV~1mV
- Measurement precision : ±0.05%rdg. ±5dgt.
(It adds to 3dgt at MEDIUM and 5dgt at FAST.)
- Display resistance : 35000 Or 3500
- Open-circuit terminal voltage : Blow 20mV peak (With ON/OFF function)
- Sampling speed : SLOW:1.56 Times/Second
MEDIUM:6.25 Times/Second
FAST:50 Times/Second
- Power source : AC100~240V±10%, [At AC100V] about 17VA [At AC200V] about 21VA
- Dimension・Mass : 206 (W) × 65 (H) × 200 (D) mm (Without protrusion) 1kg

----- MS7500 Specification (Ver. 2.12) -----

- Moving range : X, Y, Z all 100mm (When there is no optional installation.)
(Resolving power 0.02mm, Accuracy 0.02mm) Step moter drive method
- Set load : 0~1000gf (9.8N) Relolution 0.1~10g (980 μ N~98000 μ N) (By measurement system)
- Contact resistance : Alternating current 4-terminal method measurement
- Probe : Maximum 5 ϕ , Minimum 0.1mm It can be installed.
- Dimensions : W320 * H337 * D390 (This does't include protrusion.)
- Material : Hard processing aluminum
- Total Weight : About 14Kg(Without low ohmmeter)
- Current Consumption : 100VAC 50/60Hz Max300W
- I / F : USB
- O S : WindowsXP/Vista



<< Attacked measurement program >>

System 1

The constant load is set while moving the measurement place (fixation), and the contact resistance is measured.

System 2

The contact resistance is measured while increasing decreasing the load in the specified measurement place(movement).

System 3

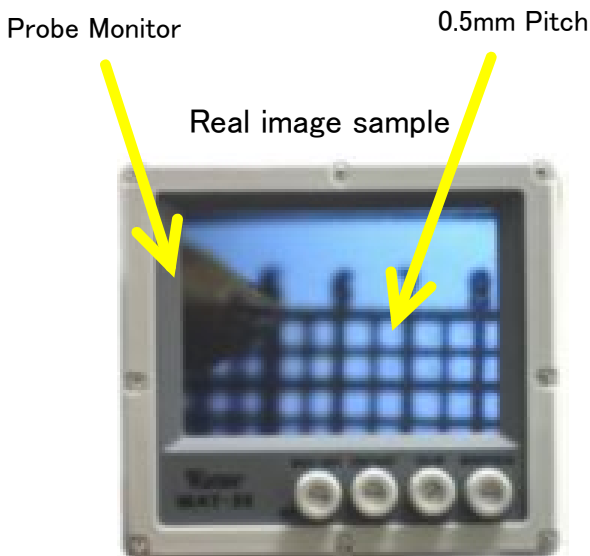
Resistance is measured while making the contact part slide after the measuring load is set. (It shuttles by the sliding distance)

System 4

The contact resistance by the passage of time is measured by a fixed load(follow).

CCD Monitor

The probe point can be obserbed according to the distance that doesn't become obstructive. (about 45mm, X16)
Because a standard video is output it is possible to record in a large scale screen and the video recorder etc. (Fixed method)



<< Monitor Specification >>

- Size: 90 (H)x100 (W)x20 (D)
- Number of pixels: 480 (W)x234 (H)
- Screen : Diagonal 85mm 3.5inch
- Element Color TFT Liquid Crystal
- Resolution 0.15 (W)x0.215 (H)mm
- Input terminal Video input terminal (NTSC)
- Power consumption 22W (180mA)

<< CCD Camera Specification >>

- Pic up Element 1/4"Panasonic Color CCD
- Number of Pixel 512 (H)x492 (V) NTSC
- Min. Illumination 2Lux/F2.0
- S/N Ratio More than 48dB
- Electro Shutter 1/60to1/100,000sec
- Load Impedance 75 Ω
- Bord Lens f12mm/F2.0
- Power Source DC12V \pm 10%
- Current 80mA
- Dimension (mm) Board Lens: 36 (W) x36 (H) x14 (D)
- Weight 105g

◆ Other options are also possible, and consult separately, please.

Price of main body : ¥3,800,000.-

Probe : Option

※Please refer to our homepage
[<http://factk.jp/ms7500probe.pdf>]