

Portable Milliohmmeter RCP2A



- ▶ Resistance measurement from $1\mu\Omega$ to 6Ω
- ▶ Measuring current up to 10 Amp
- ▶ Manual / Auto range
- ▶ Four wire measurement
- ▶ Memory of 1000 readings
- ▶ Light weight 4kg and small size
- ▶ Removable and rechargeable battery pack

Dedicated to measure bonding resistance also called metalisation, its main applications are measurement on plane, helicopter, rocket, army vehicles, for both production and maintenance.

“ Designed for easy carrying, and easy testing, the RCP2A also carries function, the data logging function which permits test sequences to be downloaded from an Excel spread sheet ”

Technical Characteristics

LOW RESISTANCE MEASUREMENT

Resistance

- 4 Measurement ranges :
 $6m\Omega$, $60m\Omega$, $600m\Omega$, $6000m\Omega$
- Auto or manual range selection with 2 currents selectable by range
- Resistance measurement from $1\mu\Omega$ to 6Ω
- Accuracy :
 $\pm 0.1\%$ reading + 0.1% full scale

Current and voltage

- Measurement current
 $100mA$, $1A$, $10A$
- Accuracy :
 $\pm 0.2\%$ reading + 0.1% full scale
- Impulse current shape 100ms
- 5V Open circuit voltage

Signals

- Measurement threshold adjustable
- Visual (red/green leds) and audible signals for results

Data logging

- 999 measurement memories with measurement results, date and time
- Programmable test sequences mode, downloading operator Identity, serial number. . . for Excel spread sheet analysis
- Testing program and results loadable Via RS232

Connection

- RS232 interface between PC and RCP2A connection
- 2 circular connectors (3 and 4 pins) on front panel with JAEGER locking system

Display

- 240 x 64 LCD matrix display with backlight
- LCD numerical screen with 6000 digits resolution
- Remote Control Display (option) with 3 meters cable

Battery

- Operating time : 20 hours or 1000 measurements at 10A
- Easy removable NiMh battery pack
- 3 hours charging time with the external charger

Range	Resolution	Current	Uncertainty @ 20°C ± 5°C, 1 year	Temperature Coefficient / °C
6Ω	1mΩ	100mA / 1A	□ (0.1%Rdg. + 0.1%FS)	40ppm Rdg. +30ppm FS
600mΩ	100μΩ	1A / 10A	□ (0.1%Rdg. + 0.1%FS)	40ppm Rdg. +30ppm FS
60mΩ	10μΩ	1A / 10A	□ (0.1%Rdg. + 0.1%FS)	40ppm Rdg. +30ppm FS
6mΩ	1μΩ	1A / 10A	□ (0.1%Rdg. + 0.1%FS)	40ppm Rdg. +30ppm FS

General Characteristics

RCP2A presentation

- Robust case in polyester resin and glass fiber, dust and water proof
- Colour ivory cream
- Portable device with small weight and carrying strap

Accessories

- Easy to use with a single measurement trigger button
- See accessories for full detailed list

International standard

- Complies with 2025 AIR regulation

Dimensions

- Height : 250 mm
- Width : 340 mm
- Depth : 120 mm

Weight

- < 4,5 kg

Power

- NimH battery Pack
- Charger 90-250V input voltage

Operating temperature

- 0°C to +50°C
- Rel. humidity up to 80% none condensing

Storage temperature

- -20°C to +50° C

Safety

With Safety Extra Low Voltage circuit

- Conforms to EN 61010-1
- Main instruments class 3
- Battery pack class 3
- External charger class 2

Options

Remote Control Display

RCP-01

Remote Control Unit (RCU) with memory

- Dimension : 200 x 120 x 60mm
- Weight : 600g
- Display: graphic LCD screen 64x240 points, 6000 digits
- Ending: 9 pins Sub-D type connector
- Type: Remote terminal operating in hands or strapped on the front arm to make the measurement easier



RCP-08

RCU / PC adapter with power supply



Battery

RCP-02

Additional battery pack



Options

RCP-03

Additional battery charger



Computer environment

RCP-09

RCP2PRO software and PC connection cable C0179A

- Sequence testing, user management, easy-to-use interface with its only 4 button production screen, easy data upload/download
- Type: PC software, working under Windows™ 2000 and Windows™ XP PRO



C0179A

To use between RCP2A milliohmeter and PC for data communication.

- Length: 2, 50 meters
- Starting/Ending: 9 pins male/ female Sub-D type connector
- Type: interconnection cable between PC and RCP2A



Protection and transport

RCP-05

Fiber glass suitcase

- Dimension: 660 x 460 x 180mm
- Weight: 7kg
- Type: to store the unit, its accessories and measurement leads



RCP-15

Protection lid

- Dimension : 340 x 120 x 60mm
- Weight : 1,5kg
- Type: protection for the front panel



RCP-16

Bag for RCP2A RCU



Available accessories

Kelvin Tips

TE9-1

- Length: 3 meters
- Starting: 4 pins male plug
- Ending: retractable tip probe
- Type: 2 wires lead (this has to be ordered with an other 2 wires lead accessory). The length of the metal part of the probe is 180 mm.
- Most common application: especially made to test small points. The retractable tip probe will make a contact with the 2 pins when pushed by the operator hand



C0251

- Length: 2 meters
- Starting: 4 pins male plug
- Ending: retractable tip probe
- Type: 2 wires lead (this has to be ordered with an other 2 wires lead accessory). The length of the metal part of the probe is 150 mm.
- Most common application: especially made to test small points. The retractable tip probe will make a contact with the 2 pins when pushed by the operator hand. Its short probe allows reaching some unaccessible parts.



C0258

- Length: 2 meters
- Starting: 4 pins male plug
- Ending: retractable tip probe
- Type: 2 wires lead (this has to be ordered with an other 2 wires lead accessory). The length of the metal part of the probe is 180 mm.
- Most common application: especially made to test small points. The retractable tip probe will make a contact with the 2 pins when pushed by the operator hand



TE28/1

- Length: 3 meters
- Starting: 4 pins male plug
- Ending: bipolar retractable pin test probe. A remote control button is on the test probe in order to start the test at distance.
- Type: 2 wires lead (this has to be ordered with an other 2 wires lead accessory)
- Most common application: especially made to measure on some surfaces you want to go through, in order to make a good contact (painting ...)



Kelvin Clips

C08

- Length: 12 meters
- Starting: 3 pins male plug
- Ending: small sized kelvin clip
- Type: 2 wires lead (this has to be ordered with an other 2 wires lead accessory)
- Most common application: especially made to crimp on small fragile connections



C010

- Length: 12 meters
- Starting: 3 pins male plug
- Ending: large crocodile clip with sharp teeth
- Type: 2 wires lead (this has to be ordered with an other 2 wires lead accessory)
- Most common application: especially made to crimp on the main ground of the plane



Available accessories

C0250

- Length: 2.50 meters
- Starting: 4 pins plug + 3 pins plug
- Ending: one Kelvin crocodile clip, 3 banana plugs and tips
- Type: 4 wires lead
- Most common application: especially made to crimp on small connection points



C0255

- Length: 2.50 meters
- Starting: 3 pins male plug
- Ending: Kelvin crocodile clip
- Type: 2 wires lead (this has to be ordered with an other 2 wires lead accessory)
- Most common application: especially made to crimp on small connection points



Extension Cable

C09

- Length: 20 meters
- Starting: 3 pins male plug
- Ending: 3 pins female plug
- Type: extension cable for 2 wires lead accessory type
- Most common application: especially made to have longer cables and test points that are separated with big distance.



RCP-04

- Length: 12 meters
- Starting: 4 pins male plug
- Ending: 4 pins female plug
- Type: extension cable for remote control unit & measurement leads
- Most common application: especially made to have longer cables and test points that are separated with big distance.



RCP-06

- Length: 15 meters
- Starting: 3 pins male plug
- Ending: 3 pins female plug
- Type: extension cable on reel
- Most common application: especially made to have longer cables and test points that are separated with big distance.



RCP-07

- Length: 90 meters
- Starting: 3 pins male plug
- Ending: 3 pins female plug
- Type: extension cable on reel
- Most common application: especially made to have longer cables and test points that are separated with big distance.



Available accessories

RCP-10

- Length: 20 meters with embase
- Starting/Ending: 3 pins male plug
- Type: extension cable on reel
- Most common application: especially made to have longer cables and test points that are separated with big distance.

RCP-11

- Length: 20 meters with embase
- Starting: 3 pins male plug
- Ending: 3 pins female plug
- Type: extension cable on reel
- Most common application: especially made to have longer cables and test points that are separated with big distance.



RCP-14

- Length: 30 cm
- Starting: 3 pins male plug
- Ending: 4 pins female plug
- Type: adaptator Jaegger 3 pins male to 4 pins female



C0262

- Length: 3 meters
- Starting: 9 pins Sub-D type connector
- Ending: 15 pins Sub-D type connector
- Type: interconnection cable between remote control display (RCP-01) and RCP2A



Calibration

RCP-91

- Calibration box



RCP-17

- Shunt 1 mΩ 0.5%

RCP-18

- Shunt 5 mΩ 0.5%

RCP-19

- Shunt 10 mΩ 0.5%

RCP-20

- Shunt 50 mΩ 0.5%



SEFELEC - Parc d'activités du Mandinet - 19, rue des Campanules - F77185 LOGNES - FRANCE
Sales department +33 (0) 1 64 11 83 42 - Fax +33 (0) 1 60 17 35 01 - Service department +33(0) 1 64 11 83 49

www.sefelec.com

Specifications subject to change without notice / © 2009 by Sefelec/LEOVILLE/RCP2A-A-UK. All rights reserved. printed in France.

