



CRT-4660C

Portable DC Resistance Tester, 20 A



KEY FEATURES

- 10 $\mu\Omega$ to 1000 k Ω
- Constant current to 20 A
- Battery powered, 10 Ah lithium
- Corrected to 75 °C automatically
- 800 sets, USB and Bluetooth
- IP45 · CAT III 600 V

Twenty Amps, Off the Battery.

A four-wire resistance tester that puts 20 A through a joint without a mains supply. The pack is a 10 Ah lithium iron phosphate battery, so the instrument goes to the plant rather than the plant coming to a socket.

The range runs from 10 $\mu\Omega$ to 1000 k Ω , resolving 0.1 $\mu\Omega$ at the bottom. Seven test currents from 20 A down to 1 mA suit the range in use, so a bolted joint and a relay coil are both within reach of one instrument.

Results are corrected to 75 °C from the sample material and the measured temperature, with a probe supplied. Copper, aluminium, iron, gold and silver are selectable, so a reading taken on a cold morning compares with one taken in summer.

Eight hundred sets are stored, printed from the panel, and sent out over USB or Bluetooth to the app or a computer. The instrument discharges itself after each test, with a reminder on the screen, and the ports are protected against overload.

IDEAL FOR

- Transformer and motor windings
- Contact and joint resistance
- Cable, busbar and switch connections
- Bonding and earthing continuity
- Coils, relays and contactors

MEASUREMENT RANGES

Range	Accuracy	Resolution	Notes
DC resistance · four-wire measurement			
10.0 $\mu\Omega$ to 1000.0 k Ω	$\pm 0.2\%$ FS ± 10 digits	0.1 $\mu\Omega$	Overrange shown as OL
Test current · seven settings, matched to the range			
20 A, 10 A, 2 A	—	—	Joints, contacts and busbar
0.2 A	—	—	Windings and cable
20 mA, 2 mA, 1 mA	—	—	Coils, relays, higher resistances
Temperature correction			
Converted to 75 °C	—	—	Cu, Al, Fe, Au or Ag · probe supplied

Accuracy is specified as a percentage of full scale plus ten digits. Without a measured temperature the correction to 75 °C cannot be applied, and readings taken in different conditions are not comparable, which is why the probe is supplied as standard rather than as an option.



WHAT'S IN THE BOX

- CRT-4660C tester
- Test leads, 5 m, one red and one black
- Temperature probe and standard resistance
- Charger, 14.6 V / 3 A
- Data lead and monitoring software on CD
- Tool case, manual and warranty certificate

TEMPERATURE PROBE · Supplied as standard. Without a measured temperature the correction to 75 °C cannot be applied, and readings taken in different conditions are not comparable.

GENERAL SPECIFICATIONS

Code	Item	Part Number
CRT-4660C	Portable DC resistance tester, 10 $\mu\Omega$ to 1000 k Ω , 20 A, battery powered	466240

MEASURES

DC resistance from 10 $\mu\Omega$ to 1000 k Ω by four-wire measurement · overrange shown as OL

ACCURACY

$\pm 0.2\%$ of full scale ± 10 digits

MATERIALS

Copper, aluminium, iron, gold and silver selectable for the temperature conversion

PROTECTION

Overload protection on the ports · self-discharge after each test with a reminder on the display · settable alarm limits

MEMORY

800 sets of data, with recall and review · monitoring software reads, saves and reports

POWER

Built-in 10 Ah rechargeable lithium iron phosphate battery, charged from the supplied 14.6 V / 3 A charger · battery level shown on screen · standby about 230 mA at 20% brightness, 27 W maximum while measuring · shuts down after about 15 minutes idle

SAFETY

IEC 61010-1 · CAT III 600 V · pollution degree 2 · IP45 · IEC 61010-4-3, radiated field 1 V/m or below

DIMENSIONS · WEIGHT

277.2 × 227.5 × 153 mm · instrument 2.3 kg with battery · test leads 850 g

RESOLUTION

0.1 $\mu\Omega$ at the bottom of the range

TEST CURRENT

20 A, 10 A, 2 A, 0.2 A, 20 mA, 2 mA and 1 mA · maximum short-circuit current 20 A

TEMPERATURE

Probe supplied · results converted to 75 °C from the measured temperature and the sample material

DISPLAY

5 inch full colour touch screen, 854 × 480, active area 108 × 65 mm · sliding backlight adjustment for dim locations · English interface

INTERFACES

USB and Bluetooth · to the Android app or to a computer

INSULATION

Above 10 M Ω at 500 V between circuit and housing · withstands AC 3700 V rms between circuit and enclosure

ENVIRONMENT

Operating -10 to 50 °C · storage -20 to 60 °C · both below 70% RH

WARRANTY

1 year, subject to product registration with GPS LTD · service and calibration available