



Ergonomic and robust instrument, IP67 waterproof; resistant to harsh working conditions. The most flexible equipment: one instrument and one sensor for the simultaneous measurement and visualization of four different parameters.

Two sensors designed to work exclusively with the multimeter MM40+.
Sensors suitable for agriculture: irrigation water, industry: waste water or process water, education: schools, etc.

Using the sensor 5048 the instrument measures simultaneously pH, EC, redox (ORP) and temperature.
Connecting the sensor 5059P, MM40+ converts in pH, EC, TDS and temperature meter.

The carrying case includes all necessary accessories to ensure accurate measurement. Instrument can be seated at an angle for convenient viewing of the display; sensor and the calibration flasks are held on upright position for easy calibration and measurement.

Authorised CRISON dealer:

Specifications

Measuring ranges

pH	-2.00 ... 19.99
mV	± 1400
Conductivity	0.01 µS/cm ... 500 mS/cm
TDS	0 mg/L ... 500 g/L
Temperature	-20.0 ... 150.0 °C (-4.0 ... 302.0 °F)

Resolution

pH	0.01
mV	1 (0.1 mV from -199.9 to 199.9 mV)
Conductivity	Depending on measuring range
TDS	Depending on measuring range
Temperature	0.1 °C (0.1 °F)

Measurement error (± 1 digit)

pH	± 0.01
mV	± 1
Conductivity	± 0.5 %
TDS	± 0.5 %
Temperature	± 0.2 °C (± 0.4 °F)

Reproducibility (± 1 digit)

pH	± 0.01
mV	± 1
Conductivity	± 0.1 %
TDS	± 0.1 %
Temperature	± 0.1 °C (± 0.1 °F)

Input impedance

> 1012 Ω. The switch from high to low impedance is made in the electrode connector.

Temperature compensation

With built-in Pt1000 temperature sensor.

Reference temperature (RT)

20 or 25 °C. Factory setting: 25 °C

Temperature coefficient (TC)

0.00 a 9.99%/°C. (Factory setting: 2%/°C.)

TDS conversion factor

0.00 to 4.44 (Factory setting: 0.64)

Accepted cell constant

Between 0.05 and 50 cm⁻¹ (Factory setting: 1.0 cm⁻¹)

pH calibration

With 1, 2 or 3 buffers selectable between: 2.00, 4.01, 7.00, 9.21 and 10.01 (at 25 °C). Automatic recognition of pH values of buffers at different temperatures. Manual calibration at any pH value. Theoretical calibration (factory settings).

Conductivity calibration (E.C.)

With 1, 2 or 3 standards selectable between: 147 µS/cm, 1413 µS/cm, 12.88 mS/cm and 111.8 mS/cm (at 25 °C).

Manual calibration at any conductivity value.

Theoretical calibration (factory settings).

mV calibration

With 1 standard, 220 mV (at 25 °C).

Automatic recognition of mV values of standard at different temperatures.

Manual calibration at any mV value.

Theoretical calibration (factory settings).

Temperature readjustment

Correction of the temp. probe deviation (C.A.T.) at 25°C and 85°C

Measuring mode

By stability and in continuous.

Connector

MP-8, 8 contacts multipin.

Display

Liquid crystal, backlit, with pictograms.

Keypad

Membrane, 6 keys

Ambient conditions

Operating temperature: 0 °C to 50 °C

Storage temperature: -15 °C to 65 °C

80% relative humidity (non-condensing)

Directives low voltage and EMC

According to CE, UNE-EN 61010-1 and UNE-EN 61326-1.

Energy management

Automatic power off after 5 minutes of inactivity (this option can be disabled by the user).

Power supply

3 x 1.5V, type AA batteries. Autonomy of over 250 hours

Enclosure

Material ABS. Degree of protection IP 67.

Physical parameters

Weight 300 g. Size 186 x 73 x 38 mm.

Specifications subject to change without notice.



Multisensors 50 59P and 50 48

Multisensors designed for multimeter MM 40+. They are compact sensors, with fixed cable and MP-8 connector (IP 67).

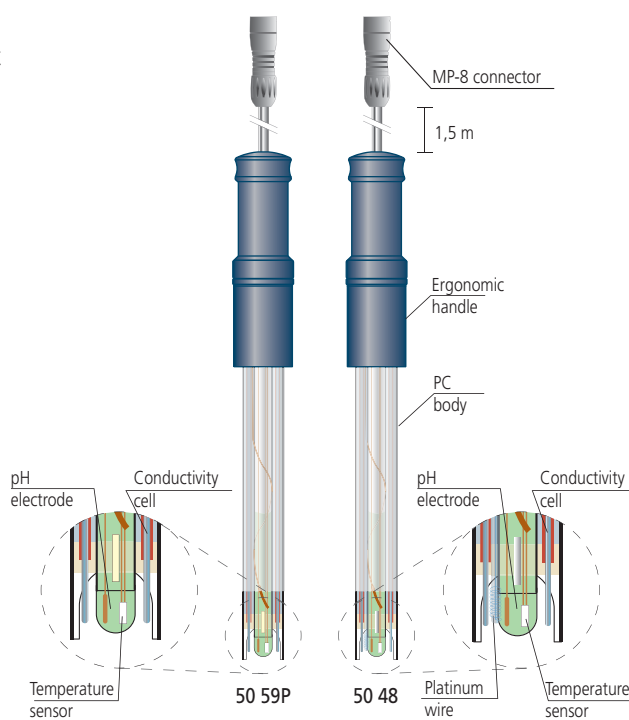
With only a 12 mm diameter they have a built-in:

- 50 59P: pH electrode, conductivity cell and temperature sensor.
- 50 48: pH electrode, platinum (redox) electrode, conductivity cell and temperature sensor.

Suitable for field and laboratory applications.

CRISON calibration flasks are screwed directly on the electrode's handle..

Code	50 59P	50 48
Measuring range	pH 0 ... 14 20 ... 200.000 µS/cm	pH 0 ... 14 20 ... 200.000 µS/cm ± 2000 mV
Working temperature	0 ... 80 °C	0 ... 80 °C
Reference electrode	Ag / AgCl wire	Ag / AgCl wire
Diaphragm	ceramic	ceramic
Electrolyte	gel (nonrefillable)	gel (nonrefillable)
Conductivity electrode	Platinum	Platinum
Redox electrode	—	Platinum
Body materials	interior: glass, exterior: plastic, PC	interior: glass, exterior: plastic, PC
Temperature sensor	Pt 1000	Pt 1000



How to order

Code	Description	Included accessories
40 01	Multimeter MM 40+, with accessories, without multisensor.	• Carrying case.
40 59	Complete kit: MM 40+, with accessories and multisensor 50 59P	• Solutions: pH 4, pH 7, pH 9, 147 µS/cm, 1413 µS/cm, 12.88 mS/cm and Redox 220 mV.
40 48	Complete kit: MM 40+, with accessories and multisensor 50 48	• Calibration tubes. • Flasks for samples and sensor cleaning • User manual.