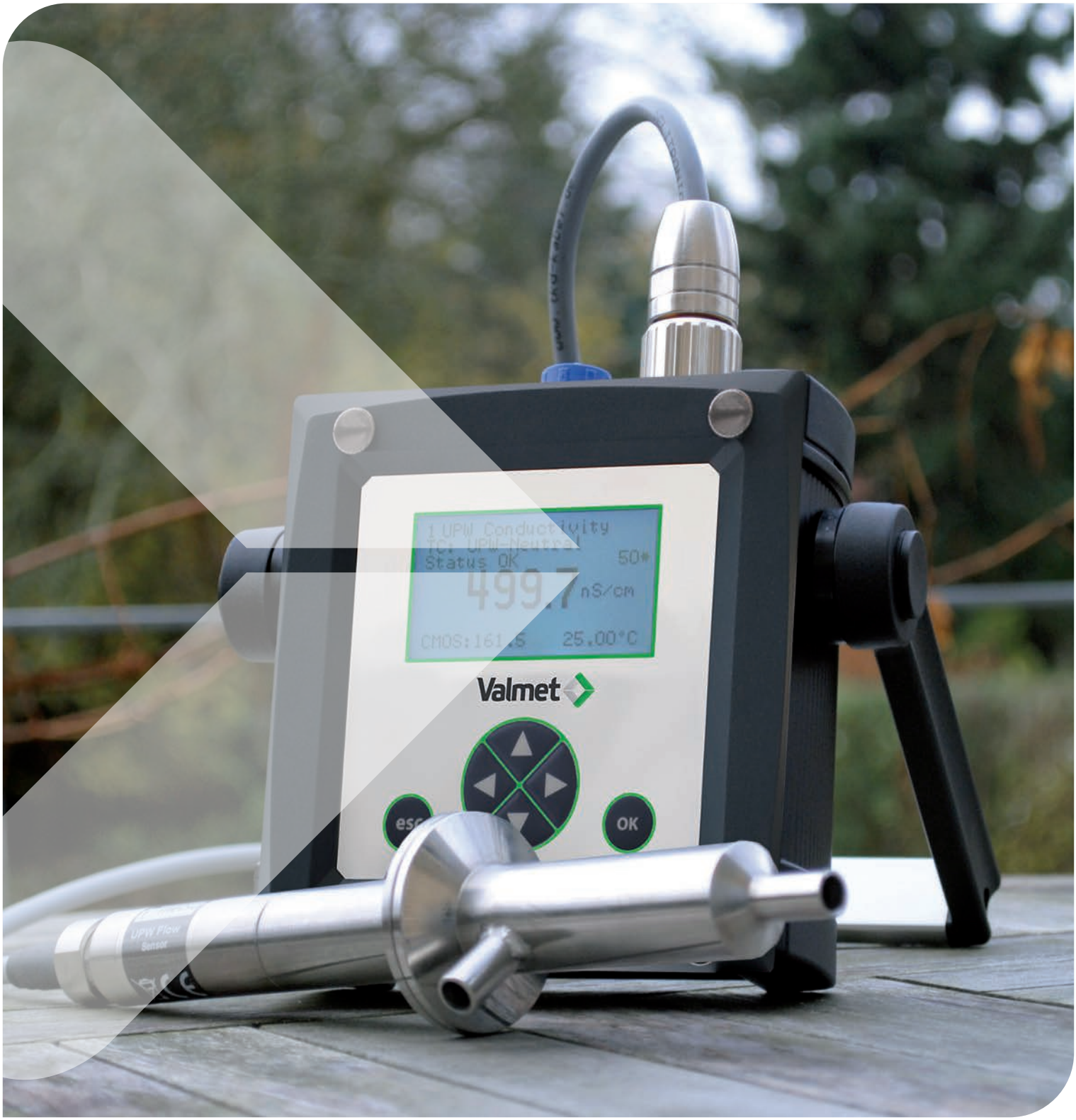
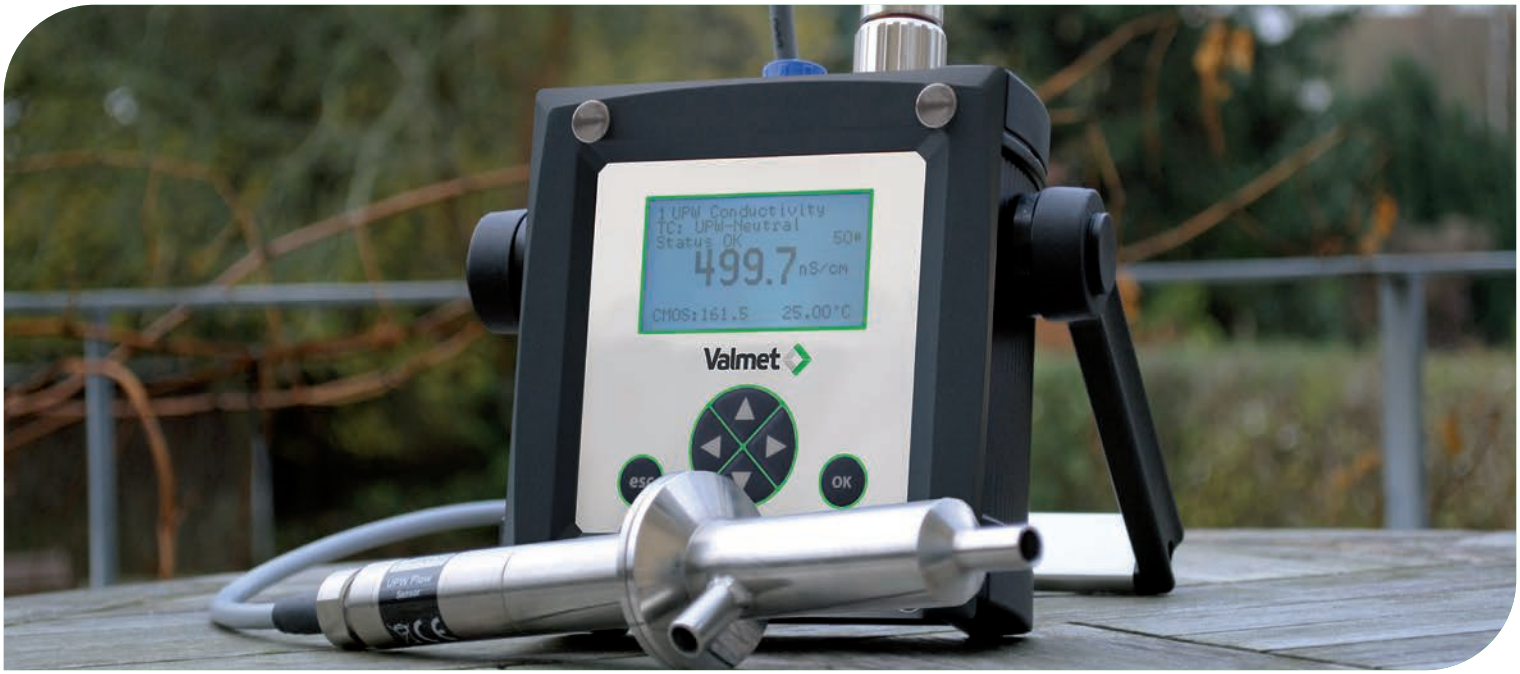
Valmet Portable Conductivity and Concentration Measurement

Series 3000





The Portable Conductivity TCU

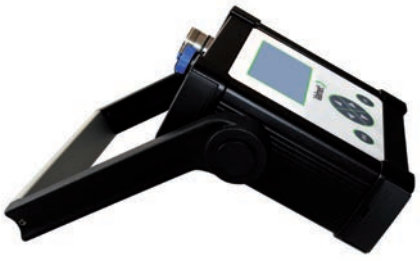
The portable series 3000 is a reference transmitter for conductivity and/or concentration measurements. Four individual set-up modes are available, each with a complete recipe and individual setting of output range and calibration.

Technical data

- Conductivity measurement range: 55 nS/cm to 1000 mS/cm
- Accuracy: ± 0.25 % (0.5 % of reading from 10 µS/cm to 0.055 µS/cm +2 ± 1 nS/cm)
- Sampling rate: 3 samples/sec.
- Built-in temperature compensations for UPW, std. Salt, lye or acid.
- Temperature measuring range: -40 °C to +250 °C by using sensor with built-in Pt 1000 4-wire interface
- Display: LCD
- Backlight: ON/OFF
- Two analog outputs for external data logger.

Enclosure

- Casted aluminum case
- Protection class: IP 65/DIN EN 60529
- Power supply: Industrial LI-ion battery
- Battery endurance: Approx. 150 hours of operation with backlight turned off. Approx. 30 hours with backlight turned on.
- Battery charging time: Primary - 3 hours, USB - 5 hours
- Battery charger: Mini USB port or primary, Primary: 100–240 V ~ 50/60 Hz 5 VA 100 mA, Dimensions: 65 x 40 x 35 mm (weight: 0.1 kg)



TCU types

TCU Type	Setup 1	Setup 2	Setup 3	Setup 4
3001	UPW Conductivity	UPW Conductivity	STD Conductivity	STD Conductivity
3003	UPW Conductivity	STD Conductivity	Concentration	Concentration

Valmet UPW flow sensor 4049 (low conductivity)

Technical data

- Materials: PTFE, EPDM, silicone rubber, steel W1.4404 (AISI 316L)
- Flow chamber: Steel W1.4404 (AISI 316L)
- Pressure: max. 2 bar at 100 °C
- Linearity: from 2000 to 0.055 µS/cm ± 1 % per decade
- Sensor cable: 1 meter
- Weight: 0.7 kg

NOTE: Calibrated in a flow chamber; cannot be used without flow chamber.

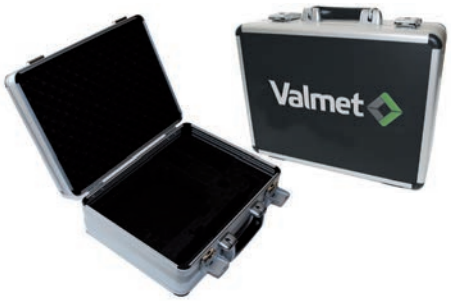
Valmet conductivity sensor 4043 (high conductivity)

Technical data

- Materials: PVDF, EPDM, silicone rubber, steel W1.4404 (AISI 316L)
- Flow chamber: Steel W14404 (AISI 316L)
- Pressure: max. 2 bar at 100 °C
- Linearity: from to 200 000 to 0.5 µS/cm ± 1 % per decade
- Sensor cable: 1 meter
- Weight: 0.5 kg

NOTE: Calibrated in a flow chamber; if used without flow chamber, cell constant correction is required. Error -0.82 %

Carrying case 349 for TCU, sensor, data logger and charger



Valmet conductivity sensor 4039 for strong acids

Technical data

- Materials: PTFE and steel W1.4404 (AISI 316L). Platinum electrodes.
- Pressure: max. 12 bar at 120 °C
- Linearity: from 2000 to 0.1 mS/cm
- Cable: 1 meter
- Weight: 2.0 kg

Valmet dip sensor 4029

Technical data

- Materials: PTFE, EPDM, silicone rubber and W1.4404 (AISI 316L) steel.
- Pressure: max. 2 bar at 210 °C
- Linearity: from 2000 to 0.055 µS/cm ± 1 % per decade
- Sensor cable: 1 meter
- Weight: 0.7 kg

Data logger 378

PVDF flow chamber 76

Traceable conductivity and temperature calibration certificates can be ordered from Valmet. If necessary, the testing conditions can be altered from the standard based on the customer preferences; please contact for additional information.

COMPLETE KITS

Type 3011 - Low conductivity kit	Type 3012 - High conductivity kit	Type 3013 - Concentration kit
TCU 3001 & charger	TCU 3001 & charger	TCU 3003 & charger
Sensor 4049	Sensor 4043	Sensor 4039
Data logger 378	Data logger 378	Data logger 378
Carrying case 349	Carrying case 349	Carrying case 349
	Flow chamber 74	Flow chamber 76

All complete kits include three calibration points free of charge.
Additional calibration points can be ordered if the standard points do not fulfill customer requirements.

0.1 µS/cm	100 µS/cm	10–20 mS/cm
5 µS/cm	10–20 mS/cm	160 mS/cm
150 µS/cm	160 mS/cm	230 mS/cm

Accurate control of conductivity measurement

Rugged portable conductivity measurement kit for measuring, calibration or verification of conductivity or concentration. The instruments can be carried in an aluminum case which can hold the TCU, sensor, flow chamber, battery charger and data logger. Measuring with or without temperature compensation in all ranges. For the verification of process water and ultrapure water, the instrument can be factory-calibrated in 3–5 points with traceability to international standards. The Valmet Portable Conductivity and Concentration Measurement is designed for use at on-site locations and laboratories.

For more information, contact your local Valmet office. www.valmet.com

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