

# Valmet Portable Conductivity Measurement

Series 3000





# The Portable Conductivity TCU

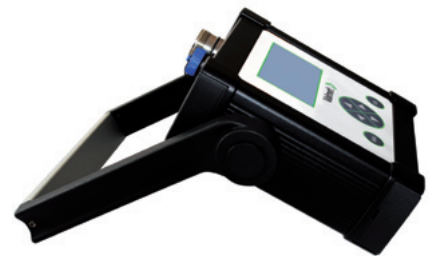
The portable series 3000 is a reference transmitter for conductivity and/or concentration measurements. Four (4) individual set-up modes are available, each with a complete recipe and individual setting of output range and calibration.

## Technical data

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

## Enclosure

- Casted aluminium case
- Protection class: IP 65/DIN EN 60529
- Power supply: One (1) industrial LI-ion
- 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 Type	TCU types			
	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 flow sensor 4049 (UPW)



#### Technical data

- Materials: PTFE, EPDM, silicone rubber and W1.4404 (AISI 316L) steel.
- Flow chamber: W 1.4404 (AISI 316L) steel.
- Maximum: 2 bar at 100 °C
- Range: From 2000 to 0.055 µS/cm cable
- Calibration points: 0.1 µS/cm, 5 µS/cm, 150 µS/cm
- Sensor cable: 1 meter
- Weight: 0.7 kg

#### NOTE:

Cannot be used without the flow chamber.

### Valmet conductivity sensor 4043 (high conductivity)



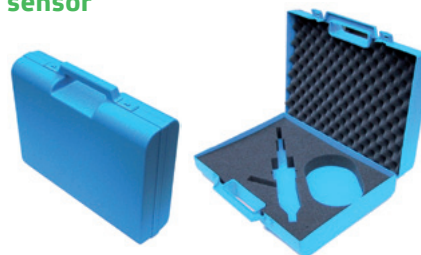
#### Technical data

- Materials: PVDF, EPDM, silicone rubber,
- W1.4404 (AISI 316L) steel and DURAN® Borosilicate glass 3.3
- Maximum: 2 bar at 100 °C
- Range: From 2000 to 0.055 µS/cm
- Calibration points: 100 µS/cm, 10 mS/cm, 200 mS/cm
- Sensor cable: 1 meter
- Weight: 0.5 kg

#### NOTE:

Calibrated in flow chamber. If used without flow chamber, a cell constant correction is required.

### Carrying case 369 for second sensor



### Carrying case 349 for TCU, sensor, datalogger and charger



### Valmet sensor 4039 for strong acids



#### Technical data

- Materials: PTFE and W 1.4404 (AISI 316L) steel. Electrodes of platinum.
- Max.: 12 bar at 120 °C
- Range: From 2000 to 0.1 mS/cm
- Calibration points: 10 mS/cm, 100 mS/cm, 500 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.
- Maximum: 25 bar at 210 °C
- Range: From 2000 to 0.055 µS/cm
- Calibration points: 0.1 µS/cm, 5 µS/cm, 150 µS/cm.
- Sensor cable: 1 meter
- Weight: 0.7 kg

### Data logger 378



### PVDF flow chamber 76



## COMPLETE KITS

### Type 3011 - Low conductivity kit

TCU 3001 and charger  
Carrying case 349  
Sensor 4049  
Datalogger 378

### Type 3012 - High conductivity kit

TCU 3001 and charger  
Carrying case 349  
Flow chamber 74  
Sensor 4043  
Datalogger 378

### Type 3013 - Concentration kit

TCU 3003 and charger  
Carrying case 349  
Sensor 4039  
Flow chamber 76  
Datalogger 378



With Valmet Portable Conductivity, you are well prepared for anything, anywhere...

### Accurate control of conductivity measurement

Rugged portable conductivity measurement kit for calibration or verification of conductivity or concentration results. The instruments can be carried in an aluminum case to contain sensor, flow chamber, battery charger and datalogger. 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 Measurement is designed for use at on-site locations or for laboratory.

- Designed for industrial environments
- Protection class: IP 65/  
DIN EN 60529
- Easy to carry around and operate
- Flexible handle
- Stand alone datalogger with LCD display
- Auto powersave at battery low
- Charge from any USB port