

# Minewater® 20 flow Meter with MC20 Display and Control Unit



- To measure the flow velocity of surface waters
- Humidity and temperature sensors can be connected simultaneously
- Large TFT display ■ All three channels can be displayed simultaneously
- Easy operation by key pad ■ Memory and logger function

Hand-held measuring instrument for  
water-flow, humidity and temperature

# MiniWater® 20

with MiniController MC20



MiniController MC20 with MiniWater20 Macro (right)  
and HygroAir20 (left)



MiniWater20 Micro



MiniWater20 Mini



HygroAir20 humidity and temperature sensor  
pluggable to housing or measuring sensor

## The hand-held MiniWater®20 is a:

- Turbine flow meter for water
- Hygrometer
- Thermometer

The MiniWater®20 hand-held measuring instrument with the MC20 operating and display unit serves to measure the flow velocity of surface waters such as rivers, brooks, lakes, canals, etc.

Ergonomic user guidance and local data storage allow versatile application of the unit.

The MC20 microcontroller is used as an operating and display unit which the MiniWater®20 measuring sensor recognises automatically when it is plugged in and converts the rotation frequency of the measuring turbine into the m/s unit of measure.

- All MiniWater20 vane measuring sensors can be connected
- Automatic sensor detection
- Very simple operation, handy keyboard
- Easy to repair on site thanks to the snap-on head principle
- All three channels can be displayed simultaneously
- Accuracy:  $\pm 2.0\%$  v.E.  $\pm 3.0\%$  rdg (for MiniWater20 Mini)
- Storage on microSD card
- IR interface for on-site report printer
- Battery operation, mains operation possible

## A typical set-up consists off:

- Water-flow velocity meter MiniWater20
- MiniController MC20 evaluation unit
- Power supply unit incl. cable
- Carrying case

## You can choose among the following Water-flow sensors:

- Micro ( $\emptyset 11 \times 15$  mm)
- Mini ( $\emptyset 22 \times 28$  mm)



S Schweizerischer Kalibrierdienst  
S Service suisse d'étalonnage  
S Servizio Svizzero di taratura  
S Swiss Calibration Service



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## MiniController MC20

<b>Measuring sensors</b>	Plastic sensor: MiniWater®20 Humidity and temperature sensor
<b>Measuring units</b>	Flow: m/s, km/h Humidity: % r.h. Temperature: °C, °F
<b>Display</b>	TFT dot matrix display
<b>Measuring rate</b>	2 measurements/s
<b>Feed</b>	Lithium-Ion battery
<b>Operating time per battery charge</b>	approx. 15 hours
<b>Housing dimensions (HxWxD)</b>	144 x 68 x 38 mm
<b>Housing protection class</b>	IP 40
<b>Weight</b>	approx. 218 g
<b>Operating temperature</b>	0 to 50°C
<b>Humidity</b>	0 to 90% r.h., non condensing

# MiniWater® 20

with MiniController MC20

MiniWater®20 measures the flow velocity of water. A measuring turbine with a rotation frequency depending on the water velocity is used as a sensor. This frequency is converted into an analogue output that is displayed in m/s.

## Plastic water sensor for surface water

	MiniWater20 Micro	MiniWater20 Mini
<b>Water-flow measuring range</b>	0.04 – 5 m/s 0.05 – 10 m/s	0.02 – 5 m/s 0.03 – 10 m/s
<b>Measuring accuracy of the water-flow velocity</b>	± 2.0% fs ± 3.5% rdg	± 2.0% fs ± 3.0% rdg
<b>Temperature</b>	-30 to +140°C	-30 to +140°C
<b>Measuring accuracy</b>	± 0.5°C	± 0.5°C
<b>Application temperature</b>	-30 to +70°C	-30 to +70°C
<b>Head size</b>	ø 11 x 15 mm	ø 22 x 28 mm
<b>Sensor length</b>	165 mm	175 mm
<b>Cable length</b>	1.8 m	1.8 m

## Humidity and temperature sensor

	HygroAir20
<b>Measuring range</b>	0 to 99,9% r.h.
<b>Accuracy</b>	±1.8% r.h. at 10 – 90 ww% r.h.
<b>Reproducibility</b>	±0.1% r.h.
<b>Temperature measuring range</b>	-20 to 70°C
<b>Accuracy</b>	±0.3°C at 0 – 40°C
<b>Reproducibility</b>	±0.1°C
<b>Media temperature</b>	-40 to +123.8°C
<b>Shaft</b>	ø 15 mm
<b>Cable length</b>	1.8 m

**Schiltknecht**  
swiss precision

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Snap-on head can only be replaced by one of the same size and measuring range. Subject to technical modifications. 0113MT