



Acoustic Doppler Current Profiler for surface water discharge measurement

- **Usage Type**
Spot
- **Measurement technology**
Acoustic
- **Parameters measured**
Flow velocity and depth
- **Product highlights**
Acoustic water profiling instrument for section by section discharge measurements in rivers and open channels up to 20 m water depth. Operated by PDA user software with Bluetooth data transmission. Low flow resistance and high boat stability.
- **Measurement range**
 ± 10 m/s
- **Accuracy**
 $\pm 1\%$ of measured value ± 0.5 cm/s

OTT Qliner 2 – Doppler technology for mobile discharge measurement in rivers and channels. The measurement is carried out using the classic verticals process. At the required vertical positions, the Qliner 2 measures both the vertical velocity distribution and the water depth. All measured data are transferred to the PDA via Bluetooth. After the measurement is complete, the discharge is available immediately. The Qliner 2 can be operated easily on cable ways, from bridges or from the edge.

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We reserve the right to make technical changes and improvements without notice. V-27/06/2019
OTT Hydromet GmbH, Germany

Technical Data

OTT Q Liner2 ADCP Boat

Water velocity measurement

Measuring range	± 10 m/s
Resolution	1 mm/s
Accuracy	± 1% of measured value ± 0.5 cm/s

Temperature measurement

Measuring range	-4 ... 40 °C
Resolution	0.01 °C
Accuracy	± 0.1 °C

Doppler sensor

Acoustic frequency	2 MHz / 1 MHz
Cell size	0.1 ... 2 m / 0.3 ... 4 m
Water depth range	0.35 ... 10 m / 1.20 ... 20 m
Maximum number of cells	40

Batteries boat/PDA

Nominal charge	4 Ah / 5.2 Ah
Voltage	12 V DC / 3.8 V DC
Operating time	typically 24 h

Radio connection

Frequency	2.4 GHz
Type	Bluetooth, Class 1
Range	up to 150 m (depending on environm. conditions)

Boat

Material	glass fiber
Size (L x W x H)	957 mm x 482 mm x 255 mm
Weight	11.1 kg

PDA

Type	Nomad (TimbaTec)
Size (L x W x T)	175 mm* x 100 mm x 50 mm
*with antenna	275 mm
Weight	620 g

Transport case

Size (L x W x H)	1,030 mm x 580 mm x 370 mm
Weight	19.5 kg - empty, 32 kg - complete

Protection class

Boat above waterline	IP67
PDA	IP65

System environmental conditions

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Operating temperature	-10 ... +60 °C
Storage temperature	-20 ... +70 °C
Shock and vibration	DIN ISO 2206 / DIN ISO 2248

"Qliner für Pocket PC" software	
Operating system	Windows Mobile
Functions	deployment planning, online data collection, data retrieval, ASCII conversion, graphical display

"Qreview" software for PC	
Operating system	Microsoft Windows
Functions	data processing, storage, export