HSR-10

Portable and handheld non-contact radar for mobile and spontaneous velocity measurements

The HSR-10 mobile handheld radar sensor is a measurement device for the contact-free determination of the flow velocity of open rivers and channels. The sensor detects the surface flow velocity by the principle of the Doppler frequency shift.

Due to the contact-free measurement method the HSR-10 is ideal for usage at high velocities, turbulent streams and rivers difficult to access. It is ecologically compatible and harmless to the water. Comfortable transmission of measurement values from sensor to receiving unit via WIFI.

FEATURES

- Contact-free method prevents soiling and damage, no sensor maintenance
- A handy compact radar for safe and fast measurements
- Operational analysis values and a convenient interface
- Sensor self-check with status and error output.
- 3-point velocity calibration certificate.
- Sommer Messtechnik ANR: advanced noise reduction system

Versions

Art	Version
22350	HSR-10 Handheld Surface Radar Bundle

Scope of delivery

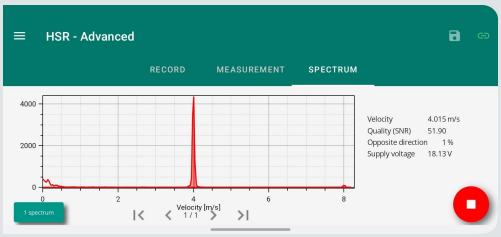
Qty	Art	Item
1	22348	HSR-10 Handheld non-contact radar
1	22427	Charger for Makita batteries
1	22351	HSR-10 Case

Accessories

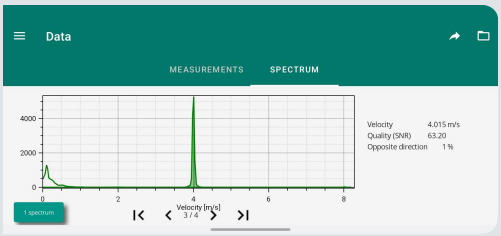
Art	Accessory
22432	Battery Makita BL1830 3Ah
22433	Battery Makita BL1820 2Ah
22582	HSR-10 tripod bundle
22743	HSR-10 app advanced version licence
-	Shoulder strap

NOTE extension app advanced version

- Record spectrum modus



- View spectrum modus



- Saving measurements and positions

Sommer Messtechnik
Strassenhäuser 27
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Specifications

Physical and environmental	
Power supply	9…18V VDC; Reverse voltage protection, overvoltage protection
Battery capacity	2,0 Ah or 3,0 Ah
Charging time	approx. 2 hrs
Outputs	Wi-Fi, 2,4GHz (transmission range up to 50 m)
Operating temperature	-40…60 °C (-40…140 °F)
Storage temperature	-40…85 °C (-40…185 °F)
Relative humidity	0…100 %
Protection rating	IP65
Size L x W x H (with battery)	263 x 123 x 271 mm (10.35 x 4.84 x 10.66 in)
Weight	1.2 kg (2.71 lb) plus 0.6 kg (1.32 lb) battery
Case size L x W x H	480 x 380 x 190 mm (18.9 x 14.9 x 7.5 in)
Case weight (without battery)	4.74 kg (10.45 lb) plus 0.6 kg (1.32 lb) battery

Velocity	
Detectable measurement range	0.08…16 m/s practical range (depending on surface water waves) 0.01…20 m/s technical range
Accuracy	± 0.01 m/s with ± 1 % FS (certified by METAS)
Resolution	1 mm/s
Direction recognition	+/-
Measurement duration	10 s
Measurement frequency	24 GHz (K-Band)
Distance to water surface	0.5…100 m (1.6…328.0 ft)
Noise reduction	Sommer Messtechnik ANR (advanced noise reduction) based on velocity spectrum analysis

Features	
Data quality	Internal measurement quality value output with each measurement