Water Level Radar Sensor

Water Level/Stage | Hydrology



HyQuant L, KISTERS' state-of-the-art non-contact water level radar sensor, operates on a 60 GHz V-Band FMCW* radar technology. It offers superior resolution and accuracy, with reduced power consumption, all at an appealing price point.

Compact design

The sensor's exceptional compactness ensures effortless and swift installations. Its discrete design further deters vandalism and enables flexible and easy installations in various support structures such as bridges and booms located in narrow and wide water bodies, urban and remote applications.

Measurement ranges

Designed for hydrological applications, the sensor is available in two ranges:

- HyQuant L20: 0.10 ... 20 m (0.32 ... 65.61 ft)
- HyQuant L50:0.15 ... 50 m (0.49 ... 164.04 ft)

Optional upgradability to L+V or Q

Upgrade to the level and velocity radar HyQuant L+V or to the discharge radar sensor HyQuant Q, without uninstalling or returning the instrument, purchasing additional sensors and/or adapting the housing.

This radar system seamlessly adapts to varied monitoring environments, thanks to adjustable filter settings easily customizable via an intuitive wizard-driven interface.

HyQuant L gives customers access to non-contact technology without requiring radar expertise or compromising on size, features or performance.

Applications

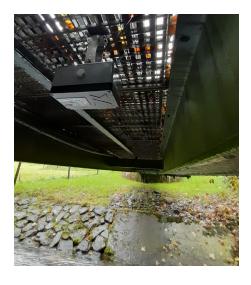
- Hydrology: rivers, streams, open channels/canals, inland waterways, tide influenced
- Risk management: flood warning and forecasting, urban flooding
- Irrigation: open channels, irrigation management
- Industrial applications: hydropower, mining, brownfields
- Climate change studies

Features

- Convenient configuration with stage point setting for real water level data
- Data interfaces: SDI-12 or Modbus
- Configuration via Wi-Fi: using KISTERS' free HyComm software with automatic firmware updates or SDI-12 or Modbus with a PC adapter or data logger
- Nearly no blanking distance: measures up to the housing cover
- Low power operation
- Effortless maintenance
- Readings in either metric or imperial units
- 10 m (32.80 ft) cable, torx key, and a 360° adjustable rotation mounting bracket included
- Simple set-up process via Quick
 Installation Guide









| Technical Specifications | | |
|--|--|--|
| Radar type/Frequency band | FMCW* 60 GHz V-Band radar level sensor | |
| Measurement range | HyQuant L20: 0.1 20 m (0.32 65.61 ft) | HyQuant L50: 0.15 50 m (0.49 164.04 ft) |
| Output rate | 1 Hz (1 measurement/second) | |
| Accuracy | <=2 mm (<= 0.07 in) | |
| Resolution | 1 mm (0.039 in) | |
| Supply voltage (range) | 10 30 VDC | |
| Power consumption at 12V | Typical ~15 mA; Wi-Fi activated: ~90 mA (incl. optional upgrade to HyQuant Q) | |
| Beam angle | 8° x 8° (azimuth by elevation) | |
| | | |
| Ingress protection | IP68 | |
| Ingress protection Communication and interfaces | IP68 SDI-12, Modbus, Wi-Fi | |
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| Communication and interfaces Operating temperature range Humidity range | SDI-12, Modbus, Wi-Fi -40 +80 °C (-40 176 °F) 0 100 % non-condensing RH HyQuant sensor with backplate: LxWxH: 160 x 97 x 91 mm, 1.15 kg (6.29 x 3.81 x | |
| Communication and interfaces Operating temperature range Humidity range Dimensions and weight | SDI-12, Modbus, Wi-Fi -40 +80 °C (-40 176 °F) 0 100 % non-condensing RH HyQuant sensor with backplate: LxWxH: 160 x 97 x 91 mm, 1.15 kg (6.29 x 3.81 x) Packaged dimensions: LxWxH: 300 x 300 x 1 | 87 mm, 2.5 kg (11.81 x 11.81 x 7.36 in, 5.51 lb) |

Accessories

HyComm configuration software: Sensor configuration via Wi-Fi/SDI-12/Modbus, choice between wizard and direct configuration modes, real-time sensor readings and colour-coded positioning help, automatic sensor firmware updates, etc.

iRIS 270 and Under Cover Pro: KISTERS brand data loggers with SDI-12 interface

Optional pole-mount bracket: for pole diameters ranging from 20 mm (3/4") to 60 mm (2").

Adapters: SDI-12 to USB and Modbus to USB **Tailor-made arm/boom structure(s)**

Please ask for details.



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