

Water Level Sensor Radar

Water Level | Hydrology

General Description

HyQuant L is one of the **most versatile and reliable non contact water level radar sensor** that adapts to your local monitoring conditions to provide accurate and stable data, whatever the task.

Suitable for applications in open water bodies, it is available in **two measuring ranges** for level monitoring:

- **HyQuant L20:**
0.1 ... 20 m (0.32 ... 65.61 ft)
- **HyQuant L50:**
0.15 ... 50 m (0.49 ... 164.04 ft)

Its chosen measurement ranges, field-proven reliability, top-tier radar electronics, sturdy housing with a flexible adapter, and configuration software with adjustable filter settings, make HyQuant L an ideal water level sensing solution for diverse monitoring scenarios.

Benefit from reduced operating costs: **excellent price/performance ratio**, stable operation with **no maintenance**, and **easy installation**.

Applications

- Hydrology and Water Management of surface waters such as rivers, streams, open channels/canals, open flumes, lakes, reservoirs, inland waterways, stilling wells.
- Risk management: early warning and forecasting, urban flooding, rain retention basins
- Agriculture: irrigation, pump stations
- Industrial applications: Hydropower, Mining
- Research

Features

Reliable measurements and system integrity including flooded conditions:

- **IP 68 rated**, robust and weatherproof housing

High resolution and accuracy over the full measuring range:

- Regardless environmental, site and deployment conditions.
- Easy to use and configure filters for adaptation to local conditions to ensure measurement data quality.

Maximum flexibility in deployment:

- Lightweight and **small design allows for a wide range of deployments**.
- **Included tilt (vertical axis) and swivel (horizontal axis) mounting bracket**.
- Integrated gyroscope to help facilitate correct alignment to the water surface for optimum data quality.
- **Easy installation** on a variety of structures such as bridges, arms, outriggers & others.
- **Low Power Consumption and unobtrusive design** anti-vandalism for additional flexibility in **remote and urban applications**.
- Flexible configuration **with stage point setting** for real water level data

The 8° x 8° beam angle generates a clearly defined spot on the water surface, for proper measurement in wide and narrow water bodies.

Easy Integration, Comm & Configuration

- **Wi-Fi, SDI-12, Modbus** and PC connection
- Interface adapter or wireless adjustment via Wi-Fi and PC using KISTERS HyComm setup software with **visual and mouse controls**.
- **Automatic firmware updates**
- **Imperial and metric units**



Technical Specifications

Radar Type/Frequency Band	FMCW 60 GHz V-Band Radar level sensing 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 (0.035 in)	
Supply Voltage (Range)	10 ... 30 VDC	
Power consumption at 12V	Typical < 15 mA, Wi-Fi activated < 80 mA	
Beam Angle	8° by 8° (azimuth by elevation)	
Ingress Protection	IP68	
Communication and Interfaces	SDI-12, Modbus, Wi-Fi	
Operating Temperature Range	-40 ... +80 °C (-40 ... 176 °F)	
Humidity range	0 ... 100 % non-condensing RH	
Dimensions and weight	HyQuant sensor with backplate: LxWxH: 160 x 97 x 91 mm, 1.15 kg (6.29 x 3.81 x 3.58 in, 2.53 lb.) Packaged Dimensions: LxWxH: 300 x 300 x 187 mm, 2.5 kg (11.81 x 11.81 x 7.36 in, 5.51 lb)	
Signal Connector	M12 8-pin	
Materials	Housing: powder coated aluminum and radome; front panel HDPE	
Scope of delivery	HyQuant sensor, Mounting bracket, 10 m (32.80 ft) cable, Torx	
Compliance	CE, FCC Class B, UL, RoHS, further information available on our Homepage	

Accessories

iRIS 270 and UnderCover: KISTERS brand data loggers with SDI-12 interface.

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

SDI-12 to USB Adapter

Arm/Outrigger structure dependent on the different site condition.

[Please ask for details.](#)



Reseller

KISTERS Australia | sales@kisters.com.au | kisters.com.au
KISTERS Europe | hydromet.sales@kisters.eu | kisters.eu
KISTERS New Zealand | sales@kisters.co.nz | kisters.co.nz
KISTERS North America | kna@kisters.net | kisters.net

 **KISTERS**