HyQual 200 / 300 / 300T

Multi-Parameter Water Quality Probes

Water Quality

General Description

KISTERS **multi-parameter water quality probes** HyQual 200, HyQual 300 and HyQual 300T are your individual complete solutions in water quality analysis. Depending on the chosen model and optional extensions (see page 2), the sensors can determine a subset or all of the following parameters:

- Temperature (standard in all versions)
- Optical dissolved oxygen
- Specific conductivity
- pH/ORP
- Turbidity
- Total dissolved solids (calculated)
- Salinity (calculated)
- Depth (level) up to 50 m
- Barometric pressure

HyQual stands out for its rugged and compact design and is made from **durable materials** such as 303 and 316 stainless steel, polyacetal (delrin), PVC, teflon, ABS, titanium, viton, neoprene, silicone, and glass, for deployment even in harsh environments as waste water or industrial water. The probes are simple to calibrate, implement, and use. They provide **reliable, stable, and repeatable results**.

HyQual probes are known for their exceptional quality. This is why they come with a **free extended warranty of 3 years** worldwide.

Easy connectivity and deployment

- For **spot measurements**, HyQual can be connected to almost any smartphone, tablet or other display device (Android or Apple) via a Bluetooth transceiver. The probe communicates and is powered via its underwater cable connected to a rechargeable Bluetooth Transceiver in a waterproof (IP67) case.
- For **continuous logging**, HyQual probes can be connected via an underwater cable RS-232 /SDI-12 to an external data logger/power supply.
- For **both continuous logging or spot measurement**, HyQual has an optional rechargeable internal logging battery pack for a self-contained data logger.

All HyQual versions are enclosed in a **waterproof (IP67) case** and can be optionally equipped with an **SDI-12 or MODBUS interface**.

HyQual probes come with an e**asy-to-use app** for accessing functions and data. It offers the usual functions (such as calibrations, parameter selection, snapshot data capture, etc.) plus geofencing, automatic logging, and emailing of data.

Applications

HyQual is suitable for **manual spot checking** as well as **unattended logging** in

- Wastewater, groundwater, industrial water, brackish water, seawater
- Lakes, rivers, estuaries
- Boreholes
- Education, research and laboratories
- Aquaculture

Features

- Rugged and compact design
- Low maintenance
- Easy to install and use
- Several output options like Bluetooth, RS-232 (both standard) or SDI-12, MODBUS (both optional)
- CE-certified
- Compatible with KISTERS range of data loggers

KISTERS

Technical Specifications

	HyQual 200	HyQual 300	HyQual 300T
Diameter	50 mm (1.95”)	75 mm (2.95”)	75 mm (2.95”)
Length	47.8 mm (18.8”)	47.8 mm (18.8”)	47.8 mm (18.8”)
Mass	0.82 kg (1.8 lbs)	1.63 kg (3.6 lbs)	1.63 kg (3.6 lbs)
Standard	Temperature sensor, dissolved oxygen sensor, specific conductivity sensor, pH/ORP sensor, calculated total dissolved solids, calculated salinity, interfaces Bluetooth and RS-232, weighted sensor guard, internal memory (months of datalogging), maintenance kit, carrying case, non-vented underwater cable (5, 10, 20, 30, 40 and 50 m)		
			Turbidity sensor, wiper
Options	Depth (level) sensor, barometric pressure, vented capacity, data cable for display devices (not for field use), Bluetooth battery pack, calibration solutions, copper anti-fouling kit, USB adapter (connect DB9 to USB), integrated SDI-12 and MODBUS output, SDI-12 adapter cable, MODBUS adapter cable, Android display, Apple display		
		Rechargeable internal battery for unattended registration/stand-alone capacity (lithium; 8 hours duration)	
Material	Resistant materials like stainless steel 303 and 316, polyacetal (Delrin), PVC, Teflon, ABS, titanium, Viton, neoprene, silicone, glass		
Power Supply and Consumption	– Supply: underwater cable (incl.), or Bluetooth battery pack (opt.), or rechargeable lithium battery pack (opt.) – Consumption: Varies depending on the number of sensors used – Battery (optional): Spot measurement: External rechargeable, high-capacity lithium battery (at least 8 hours of continuous operation); Continuous logging: Internal rechargeable, high-capacity lithium battery (consumption depending on the logging interval and site conditions)		
Output Options (Interfaces)	Standard: Bluetooth, RS-232 (optional: SDI-12, MODBUS)		
Certifications	CE, RoHS (WEEE pending)		

Technical Specifications (Parameters)

Parameter (units)	Range	Resolution	Laboratory Accuracy	Field Accuracy
Temperature (°C)	-5 to 50	0.01	0.1	0.1
pH	0 to 14	0.01	0.1	0.2
ORP (mV)	-999 to 999	1	20	20
Specific Conductivity (uS/cm)	0 to 200000	four digits; maximum of one decimal	1 % of reading +/-1	1 % of reading +/-1
Dissolved Oxygen (% Sat)	0 to 200 200 to 500	0.1 -	0.2 2	0.3 3
Dissolved Oxygen (mg/l)	0 to 50	0.1	corresponds with % sat	
Turbidity (FNU, NTU)	0 to 1000 1000 to 4000	four digits; maximum of two decimal	0.3 or 2 % of reading 4 % of reading	0.5 or 3 % of reading 5 % of reading
Depth (m)	0 to 25	0.01	0.05	0.05
Barometric Pressure (mbar)	400 to 900	0.1	1.5	1.5
Total Dissolved Solids (g/l)	0 to 65	0.01	5 % of reading	5 % of reading
Salinity (PSS)	0 to 70	0.01	0.1	0.2

Reseller

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

KISTERS