Water PH
Technical features - MODELS

Water pH sensor
For continuous pH measurement in difficult conditions as sewage treatment facilities. Designed for harsh applications consist of a submersible housing with built-in preamplifier and pH electrode. It incorporates also a built-in stainless steel NTC temperature sensor and an efficient lightning protection system.

Order numb.	DQA453	
pH	*Sensor type*	Gel-Polymer solid electrolyte
	Range	2÷12 pH
Temperature	*Sensor type*	NTC
	Range	0÷60°C
General information	*Power consumption*	0,2 Watt
	Material	Sensor protective cap: PVC Body: POV
	Protection	IP68
	Dimension (LxD)	3112x40 mm
	Output	Digital
	Connection	Integrated PU connection cable with fitted 7-pole screw connector

Accessories	Order numb.		
	**DQA458**	Input	N.2 Conductivity+Temperature or pH+Temperatrure
		Output	2x 4÷20 mA (600 Ω max.load)
		Power supply	24 Vcc
		Resolution	0,0011 µS/cm to 1 mS/cm (dipendente dal campo di misura)
		Range (programmable)	0.00÷19.99 µS/cm 0.0÷199.9 µS/cm 0.000÷1.999 mS/cm 0.000÷19.99 mS/cm 0.000÷199.9 mS/cm 0.000÷1.000 mS/cm 0.000÷1.999 µS/cm
	DQA459	Same features as DQA448	
		Power supply	230 Vca
	DYA448	Pole mounting for DQA448-9	
	DQA456.15	Cable for DQA453 L = 15 m	
	DQA456.20	Cable for DQA453 L = 20 m	
	DQA456.25	Cable for DQA453 L = 25 m	
	DQA456.30	Cable for DQA453 L = 30 m	
	DQA456.35	Cable for DQA453 L = 35 m	
	DQA456.40	Cable for DQA453 L = 40 m	
	DQA456.45	Cable for DQA453 L = 45 m	
	DQA456.50	Cable for DQA453 L = 50 m	
	DQA456.55	Cable for DQA453 L = 55 m	
	DQA456.60	Cable for DQA453 L = 60 m	
	DQA456.65	Cable for DQA453 L = 65 m	

Water Quality

Optimized combinations of sensors and accessories for water quality monitoring applications in all environmental water sources, such as rivers, streams, lakes, reservoirs and groundwater aquifers. Not applicable in very dirty waters as landfill plant percolate water reservoirs.
User's selection of available sensors to provide data for temperature (always included), conductivity, dissolved oxygen, pH, turbidity, ORP and depth.
Central cleaning system remove the fouling from the sensors reducing maintenance frequency and permits to the sensors to be installed where fouling and sediments are abundant.
Sensor has serial output, it can be connected to RS232 port of the LSI LASTEM data acquisition system.

Order numb.	**DQA800**	
General information	*Memory*	120.000 values
	Power supply	12 Vdc (150 mA during acquisition)
	Operating temperature	-5÷50°C
	Protection cage for sensor	Included
	Maximum depth	200 m
	Dimension (LxD)	584x89 mm
	Weight	3,4 Kg
	Output	RS232, SDI-12, RS485
	Material	Plastic
	Maintenance	Every 2 months or less in dirty/salty water
	Power supply cable	Included
Temperature	*Range*	-5÷50 m
	Uncertainty	±0.1°C
	Resolution	0,01 m

Accessories	**Order numb.**		
	DQA810	**Conductivity sensor** Salinity, electrical resistance and TDS can be individually set as calculated values	
		Range	0÷100 mS/cm
		Uncertainty	±0.5 % of measured value , ±0.001 mS/cm
		Resolution	0,001 mS/cm
		Calibration	Every month (depending by water quality) using standard KCl solution
	DQA815	**Dissolved Oxygen sensor** Extremely high precision through the use of the optical LDO measurement method (Luminescent Dissolved Oxygen)	
		Range	0÷20 mg/l (or 0÷200% saturation)
		Uncertainty	±0,1 mg/l for values 0÷8 mg/l, ±0,2 mg/l for values >8 mg/l
		Resolution	0,01 mg/l
		Calibration	every month (depending by water quality) using saturated 100% air

following

Accessories	Order numb.		
	DQA820	**Turbidity sensor** The self-cleaning system can be adjusted according to environmental conditions and can execute up to 10 cleaning cycles prior to every measurement. A measurement range of 3000 NTU permits turbidity measurement even during heavy rain or other events.	
		Range	0÷3000 NTU
		Uncertainty	±1% for values < 100 NTU ±3% for values > 100 NTU < 400 NTU ±5% for values > 400 NTU < 3000 NTU
		Resolution	0, 1 NTU in the range 0…400 NTU 1 NTU in the range > 400 NTU < 3000 NTU
		Calibration	Every month (depending by water quality) using microgranulate polymers
	DQA825	**pH sensor**	
		Range	0÷14
		Uncertainty	±0,2
		Resolution	0,01
		Calibration	Every month (depending by water quality) replacing electrode liquid and using pH standard solution. The reference electrode can be refilled quickly and easily independent of the pH sensor. The pH sensor doesn't have to be replaced when the reference electrode is empty
	DQA830	**ORP sensor** To monitor chemical reaction, quantify ion activity or determine the oxidizing or reducing properties of a solution	
		Range	-999÷999 mV
		Uncertainty	± 20 mV
		Resolution	1 mV
		Calibration	Every month (depending by water quality) replacing electrode liquid and using ORP standard solution.
	DQA835	**Level sensor**	
		Range	0÷25 m
		Uncertainty	±0,05 mexcluding barometric pressure changes
		Resolution	0, 01 m
	DQA801	Submersible cable to connect D5X to data logger. L = 10 m	
	DQA802	Submersible cable to connect D5X to data logger. L = 25 m	
	DQA802	Submersible cable to connect D5X to data logger. L = 50 m	
	DQA803	Submersible cable to connect D5X to data logger. L = 100 m	
	DQA804	Slip ring manual cable drum winch for cable longer than 50 meter	
	DQA805	External power adapter	
	DQA806	Portable rechargeable battery pack. Used in the field and during calibration procedure in laboratory	
	DQA807	Calibration cable. Required to connect sensor to PC during calibration procedure in laboratory	

Rain presence
Technical features - MODELS

Rain presence sensor

Rain presence sensors are used when it is necessary to discriminate between rainfall and condensation. The measurement principle employed is that of conductivity between two electrodes; these are kept above environmental temperature by heaters in order to prevent condensation.

Order numb.	**DQA060**	
	Principle	Capacitive
	Power supply	10÷14 Vdc
	Measure	Presence of rain
	Output	Relay contact (1A-40V)
	Operative temperature	0÷50°C
Accessories	**Order numb.**	
	DYA049	Mast-mounting device for ø 45-65 mm pipe
	DWA510	Cable L = 10 m
	DWA525	Cable L = 25 m
	DWA526	Cable L = 50 m
	DWA527	Cable L = 100 m