

NEW



8699

8698

Industry First

Industry first multifunctional water probe capable of measuring the conductivity range up to **200mS/cm**



Low ionic strength pH probe

Low ionic strength
pH glass bulb

Longer probe with
more electrolyte to
extend life time



Replaceable electrode & 5M long extension cable kit



Ordering Code

VZ8698AZ, 8698 meter

VZ8699AZ, 8699 meter

VZ8698PAZ, pH/EC probe for 8698 and 8699

VZ8698PAZ1, 8698/99 extension cable-5M

VP860101, empty bottle for cal. buffer storage

IP65 pH/EC/TDS/SALT/S.G/Temp. Pen

Hydroponics:8698

Aquaculture: 8699

- The world's first multifunctional water probe capable of measuring the conductivity range up to seawater salinity
- Auto ranging and integrated S.G. (Specific Gravity) and Salinity Unit for aquaculture users
- Clear LCD with backlight to display parameters in turns: PH, Conductivity, TDS, Salinity, S.G. and Temperature
- Replaceable sensor: rust-resisting EC and high quality pH
- Adjustable TDS factor for all hydroponic formula
- Multiple points calibration. EC/TDS/SALT: 4, pH:3



Auto Power Off



HOLD



Manual Logging



Memory Recall



Metric/Imperial



Low Battery



Auto Temp. Compensation



Backlight



IP65



USB TypeC for power



Eco-friendly rechargeable

Model	8698	8699
pH range/resolution	0.00~14.00/resolution :0.01	
pH accuracy	+/-0.1	
EC (Auto range)	0~199.9uS/cm, 200~1999uS/cm, 2.00~19.99mS/cm, 20.0~200.0mS/cm	
EC accuracy	+/-2% F.S +/- 1 digit	
EC resolution	0.1uS/cm, 1uS/cm, 0.01mS/cm, 0.1mS/cm	
TDS. Range (f is TDS factor)	0~199.9*f ppm, 200~1999*f ppm, 2.00~19.99*f ppt, 20.0~200.0*f ppt	
TDS. Accuracy/res.	+/-2% F.S +/- 1 digit; res.:0.1,1ppm;0.01, 0.1ppt	
TDS Factor	0.40~1.00	
Salinity range	0.00~11.40ppt; 11.4~159.9ppt(NaCl)	
Salinity accuracy/res.	+/-2% F.S +/- 1 digit; res.:0.01 ppt, 0.1ppt	
S.G. range	0.950~1.080 (NaCl)	
S.G. Resolution	0.001	
Temp. range	0.0~70.0°C(32.0~158.0°F)	
Temp. Accuracy/res.	+/-0.6°C ; 0.1(+/-1°F; 0.1)	
ATC active range	0.0~50.0°C(32.0~122.0°F)	
Temp. Coefficient	2.0% per °C(1.1% per °F)	
Normalization Temp.	25.0°C (77 °F)	
LCD size(mm)	30(H)x18(W)mm	
Operating temp.&RH%	0~50°C, Humidity<80%	
Storage temp.&RH%	0~60°C, Humidity < 90%	
Dimension(mm)	210(L)x39(W)x39(H)	
Weight	120g	
Battery	Built-in rechargeable lithium battery, 5V USB-C	
Power consumption	<6.5mA (backlight off), <12mA(backlight on)	
Response time	<90 seconds	
Sensor life time (with good maintenance)	> 6 months	
Standard Package	Meter(with built-in bat.)/Manual/USB-C cable hard storage case/wrist strap	
Optional accessory	-Empty vial for buffer storage(20mL) -5M long extension cable kit	



IP65 PH/EC/TDS/SALT/S.G/TEMP. PEN

In the past few decades, all pH and EC 2-in-1 meters designed for hydroponics were limited to measuring EC values up to 20 mS/cm. While this range is sufficient for measuring the nutrient solution used in hydroponic systems (typically between 0.5 and 5 mS/cm, rarely exceeding 10 mS/cm), it is not suitable for measuring the EC of seawater.

Seawater typically has an EC value of 50–55 mS/cm, far exceeding the 20 mS/cm limit of standard hydroponic meters. To accurately measure the EC of seawater, a specialized high-range EC meter is required, capable of measuring up to 200 mS/cm or higher.



Hydroponics
Typically 0.5 ~5 mS/cm



Seawater typically has an EC value of 50–55 mS/cm

Specific Gravity (S.G.)

The concept of S.G. has been used for centuries in marine studies, earlier conductivity, making it a familiar metric for marine related field, such as aquariums, aquaculture systems, and desalination processes.

S.G. provides a practical approximation of salinity since seawater's salinity increases with higher S.G. For example: An S.G. of **1.023–1.025** corresponds to the typical salinity of **35 ppt** in ocean water.



Salinity (SALT)

Salinity refers to the concentration of dissolved salts (mainly sodium chloride, NaCl) in seawater, typically expressed in ppt (parts per thousand). The average salinity of the world's oceans is approximately 35 ppt, meaning that each kilogram of seawater contains 35 grams of salt.

However, the salinity of the ocean varies due to regional environmental factors and natural processes. A salinity range between 30 ppt and 40 ppt is commonly observed.

