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# THE BEST SOLUTION FOR ACCURATE RESULTS IN ALL APPLICATIONS

HQD meters and high performance pH electrodes



Be Right™

# Easy to handle, providing accurate results



HQD benchtop multi-meter

## Probes for every application

For high volume labs or applications where performance is critical, INTELLICAL Red Rod pH electrodes incorporate proven technology to deliver superior accuracy and response times, even when measuring challenging samples over a wide temperature range.

Standard lab probes and rugged field probes are available to measure a wide variety of parameters. Several probes use speciality designs for specific measurement applications.

All INTELLICAL probes are automatically recognised by HQD meters and retain calibration history and method settings to minimise errors and setup time.

## Red Rod technology

The unique Red Rod Technology provides not only fast response time but also long-term accuracy and reproducibility. Red Rod electrodes feature:



**Fast and accurate response** thanks to the symmetrical electrode chain formed by the internal and external Red Rod reference elements.

**Stable signal** as the Red Rod Technology protects the reference elements from light interference. Saturated KCl salt-bridge aids stable liquid junction potential.

**Wide temperature range** (0–100 °C) thanks to fast temperature response of Red Rod Technology.

The symmetry of Red Rod electrodes means that the iso pH is the same as the zero pH which provides **highly reproducible results** even when temperature fluctuations occur.

**Trouble-free liquid junction** as Red Rod encapsulation of reference elements means no silver ions and therefore less risk of clogging.



Full specifications of the electrodes featured in the table are available on our website or you can call your local office.

You may also be interested in our poster:  
**Cleaning & Maintenance of pH electrodes**  
 Just give us a call to request your personal copy.

## Select the best pH electrode for your application

	PHC101	PHC108	PHC201	PHC281	PHC301	PHC705A	PHC705	PHC725	PHC729	PHC735	PHC745	PHC805
<b>Red Rod technology</b>						•	•	•	•	•	•	
<b>Type of sample</b>												
High solids content										B	A	
Alkaline solutions				B	A							
Non aqueous media											A	
TRIS Buffer				B						A		
High viscosity										B	A	
Ultra-pure water										A	B	
Semi-solid samples (cheese, meat...)		A										
<b>Application/industry</b>												
<b>Water / environment</b>												
Low ionic strength				B								A
Wastewater	A	B										
Pool / Spa			A	B								
Sea water				A						B		
Drinking water				A				B				
Boiler/ Cooler				A						B		
<b>Chemical</b>												
Galvanic baths												A
Photography baths												A
Paint												A
Lacquer												A
<b>Agriculture</b>												
Soils (in water)											A	
Soils with high level of salt											A	
Irrigation water				A								B
Suspensions								A				B
<b>Biology / pharmacy</b>												
Agar		B			A							
Blood									B			A
Ultra-pure water										A		B
<b>Cosmetics</b>												
Fat, cream, cosmetics		B										A
Emulsions										B		A
Skin									A			

	PHC101	PHC108	PHC201	PHC281	PHC301	PHC705A	PHC705	PHC725	PHC729	PHC735	PHC745	PHC805
<b>Red Rod technology</b>						•	•	•	•	•	•	
<b>Food / beverage</b>												
Soft drinks								A		B		
Cacao and derivatives											A	
Wine, must, vinegar										A		B
Juices, canned vegetables											A	B
Hops, beer					B		A					
Liqueur							A			B		
Oil, creams, mayonnaise	B										A	
Jam	B										A	
Milk							A			B		
Yoghurt, curdled milk	B									A		
Brine			B								A	
Cheese, meat, fruit	A											
Bread dough	A											
<b>Paper / textiles</b>												
Paper										A		
Paper pulp or paste	B										A	
Textiles (fabrics and prints)									A			
Textiles (dyes and colourings)											A	
Leather									A			
Fur (treatment bath)				B							A	

A=Recommended Choice B=Alternative

All probes read from 0–14 pH other than PHC101 (2–14), PHC108 (2–12) and PHC729 (0–12).  
 Temperature range: 0–50 °C for PHC101 | 0–60 °C for PHC108 | 0–80 °C for PHC201, PHC281, PHC301, PHC805 | 0–100 °C for PHC705A, PHC729 | -10–100 °C for PHC705, PHC725, PHC735, PHC745

# HQD meters



## Easy to use in the field

The wide variety of rugged probe options available for the portable meter means it is perfect for field use. All connections between the meter and the probe are secure and waterproof. Connectors can be colour-coded for quick identification. Information is clearly displayed on one screen with back light for low light conditions. Display results can be enlarged for easier reading.

## Simple and fast lab setup

Offering a complete portfolio of water testing parameters and a simple benchtop setup, this meter provides the ultimate in lab analysis. The intuitive user interface with guided calibration ensures accurate results, and with a large, backlit LCD screen, the meter is simple to read even if measuring 2 parameters simultaneously.

Parameter	Portable meters				Benchtop meters		
	HQ11D	HQ14D	HQ30D	HQ40D	HQ411D	HQ430D	HQ440D
pH	•		•	•	•	•	•
Conductivity, TDS, salinity, resistivity		•	•	•		•	•
Dissolved Oxygen (LDO)			•	•		•	•
ISE			•	•		•	•
ORP/Redox potential	•		•	•	•	•	•
Inputs for INTELLICAL probes	1	1	1	2	1	1	2
Casing IP Rating	IP67				IP54		
Dimensions (HxWxD), weight	36 mm x 95 mm x 197 mm 323 g (without batteries)				86 mm x 175 mm x 234 mm 850 g		

Detailed technical specifications, electrodes for additional parameters, buffer solutions and accessories are available. Please visit our website or give us a call.