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# The best solution for accurate results in all applications

HQ Series meters and high performance  
pH electrodes



# Easy to handle, accurate results



HQ Series Multi Parameter Portable Meter

## Probes for every application

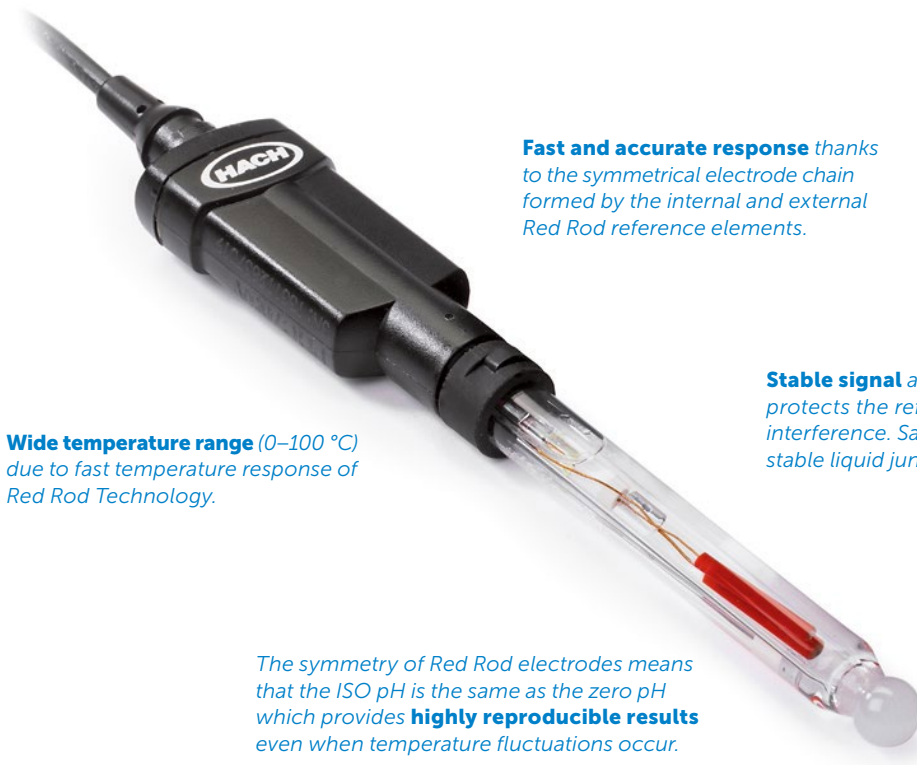
For high volume labs or applications where performance is critical, Intellical Red Rod pH electrodes incorporate proven technology to deliver superior accuracy and response times, even when measuring challenging samples over a wide temperature range.

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

All Intellical probes are automatically recognised by HQ Series 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. Features include:



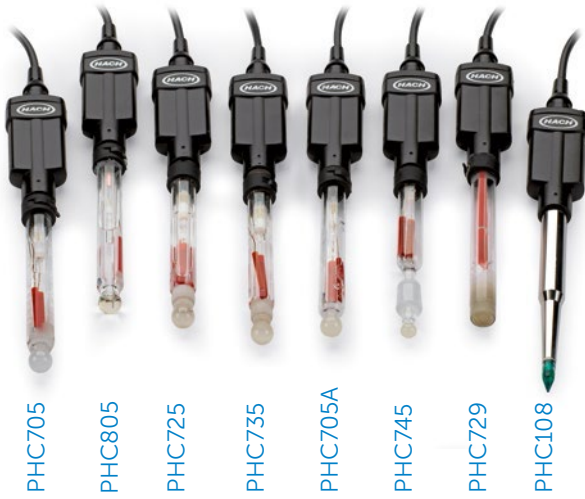
**Wide temperature range** (0–100 °C) due to fast temperature response of Red Rod Technology.

**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.

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 below, and are available on our website.

## 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	

	PHC101	PHC108	PHC201	PHC281	PHC301	PHC705A	PHC705	PHC725	PHC729	PHC735	PHC745	PHC805
<b>Red Rod Technology</b>						•	•	•	•	•	•	
<b>Cosmetic</b>												
Fat, cream, cosmetics		B										A
Emulsions											B	A
Skin									A			
<b>Food / Beverage</b>												
Soft drinks								A		B		
Cacao and derivatives												A
Wine, mustard, 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

# HQ Series Portable and HQD Benchtop Meters



## Easy to use in the field

The wide variety of rugged probe options and single use buffer solutions 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.

## HQ Series Portable Meters

Parameters	HQ1110	HQ1130	HQ1140	HQ2100	HQ2200	HQ4100	HQ4200	HQ4300
pH	•			•	•	•	•	•
Conductivity, TDS, salinity, resistivity			•	•	•	•	•	•
Dissolved Oxygen (LDO)		•		•	•	•	•	•
ISE						•	•	•
ORP/Redox potential	•			•	•	•	•	•
Inputs for Intellical probes	1	1	1	1	2	1	2	3

## HQD Benchtop Meters

Parameters	HQ411D	HQ430D	HQ440D
pH	•	•	•
Conductivity, TDS, salinity, resistivity		•	•
Dissolved Oxygen (LDO)		•	•
ISE		•	•
ORP/Redox potential	•	•	•
Inputs for Intellical probes	1	1	2

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