

CRIUS 100 and 100+ pH/ORP Meter



KEY BENEFITS

- Patented Polymer gel 'double junction'
- Extended life by 50%
- Automatic Temperature Compensation
- pH/ORP and Temp display
- 0-10,000uS Conductivity
- Faster Response
- Better Stability
- Better Reproducibility
- PID control as standard
- Text alarms direct to a mobile
- Multiple probes
- On board datalogs

PRINCIPLE OF OPERATION

At the Heart of the CRIUS 100 and 100+ are the K-series pH and ORP electrodes. These electrodes are patented and are filled with a polymeric gel. This innovative design makes the electrodes more responsive and with a longer life than ordinary electrodes. Although they command a higher price in the market place these sensors are more than cost effective with their longer life and considerably lower maintenance requirements.

In addition to the state of the art sensors the CRIUS 100 range offers a vast array of communication protocols including Modbus, TCP/IP (with webserver), USB, RS485, TTL, Relays and 4-20mA outputs. Despite all of the additional functionality that this unit has to offer, the purchase costs are less than or comparable to, its competitors. Added to the cost savings of a truly automatic (no operator present), self cleaning and auto-calibration



AUTOMATIC CALIBRATION

The CRIUS 100 pH and ORP analysers also offer self cleaning and self calibration. Cleverly engineered and using state of the art electronics the CRIUS is able to save customers considerable sums of money by auto-calibrating at user defined time intervals, using three buffers at pH4, pH7, and pH10. The CRIUS will clean itself, and then calibrate itself, even reporting the confidence of its calibration.

Applications

- Water/Waste Treatment
- De-Ionised Water
- Boiler Water
- Trade Effluent
- Low Conductivity Water

Anywhere you have a requirement to measure pH is a suitable application for the CRIUS 100 with or without auto calibration. The CRIUS 100 is particularly suited to working where reliability and ease of use are paramount.

Multiple Probes

- Reduced cost per point
- pH and ORP on the same instrument
- Add Chlorine or Ozone (see CRIUS pHybrid)

The CRIUS 100 comes equipped to take up to two probes as standard while the CRIUS 100+ takes up to four probes thereby greatly reducing the cost per point. Probes can be mixed so you can select, for example, a single analyser with both pH and ORP.

Satisfied customers said about the K Series:

"Far more accurate in our samples. The reading is also very stable. Its accuracy is far superior and the time taken for a stable reading to appear is far less than before."

"Faster response means better control of the reaction which gives us a higher yield"

"Lifetime of electrode is much longer and performance far better than the previous type."

Process House
Dominion Court
Billington Road
Burnley
BB11 5UB
Tel: +44 (0)1282 422835
Web: www.processinstruments.net



SPECIFICATIONS

pH ELECTRODES

Type:	W-Type Rod membrane pH electrode
Reference Type:	Patented
pH Range:	0-14
Slope:	95-102%
Pressure range:	0-3Bar
Long Term Stability (drift):	<0.01 pH/Hour
Reproducibility:	<0.01 pH
EO:	-25mV to +25mV
Electrode Resistance:	100-500 Mega Ohms
Response Time:	95% of step pH2 to pH12 <5s
Temperature Range:	0-40°C
Cable length:	6m (any length optional)
Shelf Life:	12 Months
ATC:	PT100
Estimated life:	12-18 months application dependent

ORP ELECTRODES

Type:	Platinum Ball
Reference Type:	Patented
ORP Range:	-1999 to 1999mV
Slope:	95-102%
Pressure range:	0-3Bar
Long Term Stability (drift):	<0.1 mV/Hour
Reproducibility:	<0.1mV
Electrode Resistance:	<2 Mega Ohms
Response Time:	95% of step pH2 to pH12 <5s
Temperature Range:	0-40°C
Cable length:	6m (any length optional)
Shelf Life:	12 Months
ATC:	PT100
Estimated life:	12-18 months application dependent



ANALYSER

Power:	100-240VAC (24 volt optional)
Display:	LCD Backlit 128x64 graphical
Outputs:	4 configurable alarms (relays). 2 x 4-20mA outputs
Inputs:	1 x low flow alarm 1 x low buffer alarm
Comms:	RS485 Modbus TCP/IP (Webserver)
Datalogging:	One year at 15 min intervals (equiv.)
Eventlogging:	500 events

AUTOCALIBRATOR

Power:	110 VAC/220VAC/24VDC (Fixed)
Outputs:	Low flow alarm

GSM/GPRS MODEM

Power:	110-240 VAC (12/24 volt optional)
Sim card:	User supply
Region:	Quad band