

## Microprocessor pH ORP Controller



### DPH 513

**DPH 513** is a full featured pH / ORP Controller, ideal for Batch and Semi-Continuous Processes that require “Critical Control” using only minimum dosing reagents to Control pH.

Its a unique “**Mark Space**” (Shot & Delay) Control Algorithm which adapts to any process dynamics and maintains extremely tight control with absolute minimum quantity of reagent dosing requirement.

“**Automated Electrode Cleaning**” program for trouble free operation.

### FEATURES

- Microprocessor based , Real Time Fault Tolerant Design.
- User Selectable pH or ORP Control Mode
- Advanced Signal conditioning provides exceptionally stable reading which adapts to virtually any Titration curve.
- Extremely tight pH control with fast response. Ideally suited for long duration and critical Fermentation and Batch processes.
- Simple ON / OFF Control elements used which are low cost & easy to maintain
- User selectable NIST or US Buffer set for Calibration
- Powerful, 3 Point Software Calibration with Automatic Buffer recognition and Buffer pH Compensation for Temperature
- “**Electrode Condition Monitoring**” with warnings for poor electrode condition.
- Digital input for “Control Halt” from PLC or other Process Automation & Control System
- Available in Weatherproof IP65 or Flameproof Enclosures

## GLOBAL ELECTRONICS

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## SPECIFICATIONS

Display : 7 Digit, High Brightness 7 Segment LED Display  
with 11 Annunciator LED's

Display : 4 Digits for pH / mV, 3 Digits for Temp.  
And all 7 for Msgs.

Annunciators for ATC, MTC, °C, RD, pH, mV

	<b>pH</b>	<b>mV</b>	<b>Temp</b>
Measurement Range	: -2.00 to 15.99	±1999	-50°C to +200°C
Resolution	: 0.01	1	0.1 (-19.9 to 99.9)
Accuracy	: 0.1%±1 digit	0.1%±1 digit	0.1%±1 digit
Reproducibility	: 0.01	1	0.1
Temperature Compensation	: Manual / Automatic -30 to 150°C (RTD PT100)		
Input Impedance	: > 10 Tera Ohms		
Input Bias Current	: < 1 pA @ 25°C		
AP Range	: ± 75 mV		
Slope:	: 75% to 125%		
Programming	: Through user friendly keyboard and Prompting Display		
Calibration	: <b>pH</b> : 2 or 3 Point Calibration using any of the following : USA : 4.01, 7.00 Buffers or NIST : 4.01, 6.86 * 9.18 Buffers <b>Temperature</b> : Single and Two Point at any Temperature		
Control Limits	: 6 Programmable limits for pH / ORP Mode & 1 Hi Temperature Limit.		
Control	: <b>Dual Mark Space Control</b> with Relay outputs for Hi, Lo relays @ 230 V AC, 3A for resistive Load.		
Output	: RS485 (MODBUS)		
Operating Temperature	: -10 to + 45 °C		
Power	: 110 / 230V ± 45 to 55Hz, 10 VA		
Dimensions	: Panel Mount :96 (W) x 96 (H) x 150mm (D) Wall Mount : 200 (W) x 200 (H) x 150mm (D) Flameproof : 250 (W) x 250 (H) x 200mm (D)		

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