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## Global DPH 514 pH STAT



This is specially designed for critical pH control in Laboratory processes and experimentation.

The pH STAT uses a highly advanced pH control algorithm to deliver very accurate pH control using the very minimum if required dose chemicals. The control algorithm can achieve pH control within 0.05 pH units of the desired value, thus greatly enhancing the product quality.

### Applications include

- Process development experimentation for manufacturing process optimization
- Regular laboratory processes like Buffers and Solution preparation.

### Global pH STAT is offered in two variants.

1. pH STAT with one dosing pump that can be used for ACID or BASE dosing
2. pH STAT with two dosing pumps for ACID and BASE



## FEATURES

- Compact Stand alone pH Control system with Peristaltic dosing pumps in SS Enclosure
- 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 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.
- **"Control Halt"** switch for Start & Stop of Titration.

## 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

6 digit LCD Timer for Peristaltic pump running time.

	pH	mV	Temp
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		



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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)

### Peristaltic Pump specifications

Flow Rate	:	6ml / min with 1mm I.D. tubing @ 42 rpm 14ml / min with 2mm I.D. tubing @ 42 rpm 33ml / min with 3mm I.D. tubing @ 42 rpm
Tubings	:	1 to 3mm I.D. with 1 to 1.6mm wall thickness
Pump Head	Outer ARM (TRACK)	: Acetal Co-Polymer
	ARM cover	: Transparent Polycarbonate
	Pump Head	: G.F. Nylon
	Rollers	: Carbon filled Nylon
	Motor	: PMDC geared motor
	Speed	: 85 RPM (Max)
	Supply	: 24V DC
Speed Control	:	DC Drive, 20 to 85 RPM



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## pH STAT DPH 514S

### Supply includes

- |  |            |
|--|------------|
| 1. pH Controller DPH 513   | 1 No.      |
| 2. pH Electrode, 0 – 14pH, -5 to +130°C, 120mm long, PG13.5 mounting | 1 No.      |
| 3. Detachable pH Electrode cable 3 m long with BNC connector         | 1 No.      |
| 4. RTD Thermocompensator with Pt Solution ground, 3 m cable          | 1 No.      |
| 5. Peristaltic Dosing pump with Speed controller                     | 1 No.      |
| 6. 6 digit LCD Display Timer for Peristaltic pump running time.      | 1 No.      |
| 7. 3mm ID Silicon tubing   | 1.5 meters |
| 8. Table top SS Enclosure  | 1 No.      |

## pH STAT DPH 514D

### Supply includes

- |  |          |
|--|----------|
| 1. pH Controller DPH 513   | 1 No.    |
| 2. pH Electrode, 0 – 14pH, -5 to +130°C, 120mm long, PG13.5 mounting | 1 No.    |
| 3. Detachable pH Electrode cable 3 m long with BNC connector         | 1 No.    |
| 4. RTD Sensor with Pt Solution ground, 120mm long, 3 m cable         | 1 No.    |
| 5. Peristaltic Dosing pump with Speed controller                     | 2 Nos.   |
| 6. 6 digit LCD Display Timer for Peristaltic pump running time.      | 2 No.    |
| 7. 3mm ID Silicon tubing   | 3 meters |
| 8. Table top SS Enclosure  | 1 No.    |

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