



PH METER & ADJUSTMENT SOLUTIONS

# Application Driven Analyzers

Designed by MANTECH's in-house software development team, MANTECH Pro<sup>™</sup> takes the guesswork out of your analysis.

All parameters MANTECH offers are built into the software only requiring additional hardware to add more analyses to a single station set up.

MANTECH Pro is included with every MT Series model.



### No LCD Screens

### No Handwritten Benchsheets

### No Manual Calculations

### **Quick and Convenient Calibrations**

No need to remember when probe was last calibrated. MANTECH Pro<sup>™</sup> saves all 3-point calibrations and notifies analysts when they need to re-calibrate (which only takes 30 seconds!).

Cancel Script Cancel Action	Real Time Reading Interface: Analog 1 -140.809 mV	Sample Time: 0 Sample: Action Time: 0 Action:		tun Time: 00:00:29.40			
Script Monitor Live Plots Plots Calibration Plots Pe							Save Chart
Plots Calibration Plots Pe		View Calibration Data			 	Standards	Reading(mV)
antiation		view Calibration Data				standards	166.626
						7	16.113
200						10	-140.869
100-							
100 - 50							
50			*				
50			*				
50			*				

### Store & Search 1000s of Data

Multitasking capabilities allow analysts to search all historical data saved in MANTECH Pro™ even during a run. MANTECH Pro is agnostic to any LIMS for full importing/exporting.

earch Options							Detail Views			
Filter:			in	Any		*	Titratio	n Detail		
ate Range: 1	2/03/2020	*	to	12/04/2	2020	*	Calibrati	on Detail		
Run By Sampl	e By Titration	By Calib	oratio	on					LC	
Sample										
ID	Template	Date/T	ime	*	User	Run ID	Run Configu	ration Templat	e PH	Conductivity
pH Cal	pH Cal test	12/04/2	020	13:37:19	mantech	36				
pH Cal	pH Cal test	12/04/2	020	13:40:41	mantech	37				
pH Cal	pH Cal	12/04/2	020	13:49:18	mantech	38				
pH Analysis - 1	pH Analysis	12/04/2	020	15:34:58	mantech	39			13.2618	
< Titration	. III s						bration			,
ID	Temp	late	Date	/Time	User	ID		Template	Date/Time	User
						Cali		Calibration	12/04/2020 1	3:33:19 mantech

### **Step-By-Step Prompts**

Standardize your analysis procedures from analyst to analyst with built-in user defined step-by-step prompts.

Sample ID		Script	Po	sition
pH Sample-1	Message		× 1	
pH Sample-2	message		2	
pH Sample-3		Pour 20mL of sample into the beaker	3	
pH Sample-4		Four 20mc of sample into the beaker	4	
pH Sample-5		Press OK to continue	5	
		OK	1	

### **Shortcut Buttons**

Customize home screen shortcut buttons for routine analyses, maintenance or even manuals to streamline analyses.



## MT3 A pH Meter That Does More

The MT3 will automatically measure the pH, or other ions such as fluoride, using stability criteria defined by you. Optional software-controlled variable speed stirrer paddle for automated mixing. All data is then recorded in the software and can be automatically exported to your LIMS.

#### The MT3 pH meter includes:

- 1. pH probe (optional paddle stirrer & USB temperature probe)
- 2. MiniHub<sup>™</sup> Interface
- 3. Analysis stand
- 4. Accommodates any cup or tube size

Note: <u>Any parameter</u> offered by MANTECH can be added to this single analysis station controlled by the same software.

## MT4 Automated pH Measurement & Adjustment

Similar to the MT3, measures and records pH readings in MANTECH Pro<sup>™</sup> however, the MT4 goes one step further. If the sample is outside your desired pH range, one of the two peristaltic pumps will automate the delivery of either acid or base until the desired pH is achieved.

The MT4 pH meter with adjustment includes:

- 1. pH probe, paddle stirrer, temperature probe and two dispense tips
- 2. MiniHub™ Interface
- 3. Analysis stand
- 4. Accommodates any tube size
- 5. Peristaltic pumps delivering either acid or base (option for 1 or 2 depending on the procedure needed to adjust within desired range)

Note: MT4 is ideal for biochemical oxygen demand (BOD) sample preparation as well as PeCOD sample preparation.





## SPECIFICATIONS

### **ph Application**

Parameter	Application	Methodology		Range of Measurement	RSD Specifications
рН	Water, Soil	pH Electrode Measure- ment	EPA 150.1, 150.2; SM 4500-H+ B; ASTM D 1293; ISO 10523	1 - 14	+/-0.05

### SOFTWARE & HARDWARE

	Description	Features	loT Connection	Dimensions (l x w x d)
MiniHub™ Interface	The compact, software-controlled interface connects all system components including electrodes, stirrers and more for all param- eters.	<ul> <li>x6 digital outputs and x6 digital inputs:</li> <li>x4 Galvanically separated electrode ports with BNC connectors</li> <li>x3 24V software-controlled and variable speed stirrers</li> <li>x3 liquid level sensors (specific to BOD5 analysis)</li> </ul>	Ethernet/IP connection	6" x 4" x 2" 15 x 10 x 5cm
Probe Stand & Holder	Accommodates several probes, stirrers and dispense tips (depending on applications) to easily move between rinse cups and sample tubes, cups or beaker as well as houses the MiniHub <sup>™</sup> interface.	<ul> <li>Screw to raise or lower for moving probes.</li> <li>Accommodates any tube, cup or breaker size.</li> </ul>	N/A	10.5" x 7" x 6.5" 27 x 18 x 16.5cm
pH Electrode	TitraPRO4 pH electrode and communication cable featuring fast response time with su- perior accuracy and repeatability.	<ul> <li>3 point calibration</li> <li>Calibration Time: 30 seconds</li> <li>pH Value: ≤10 seconds</li> <li>pH Range: 0 - 14 pH</li> </ul>	BNC/S7 connection	12mm (dia) x 120mm (l)
MANTECH Pro™ Software	Requires computer with Windows 10 or 11 Pro OS. with built in capabilities for all pa- rameters offered by MANTECH in a single computer and software platform. Simpli- fies your analysis by consolidating all thou- sands of sample data in one place, gives real-time results with live titration plots and logs maintenance/service performed on hardware with reminders for daily, weekly, monthly and annual tasks.	<ul><li>Multi-language</li><li>Custom shortcut Buttons</li></ul>	USB connection	N/A
Peristaltic Pump	MANTECH's IntelliPeri™ (peristaltic pump) is completely controlled by MANTECH Pro to calibrate as well as adjust the flow speed and direction for any application.		USB connection	7" x 6" x 6" 18 x 15 x 15cm



## WHY MANTECH

### TRUSTED WORLDWIDE



With 3,500+ analyzers in the market, MANTECH systems are trusted to produce more than 700,000 results every day that protect public health and the environment.

### SUPPORT

MANTECH offers several options:

- Context sensitive GIFs and instructions built into software
- On-Demand virtual support
- In-person visits with MANTECH Technical Representatives or distributors

### END-TO-END MANUFACTURER



MANTECH develops and manufactures all hardware and software as a single source provider.

### IOT CONNECTIVITY



All MANTECH system components feature IoT connectivity via USB or ethernet/IP connection for bi-directional communication with the software.

### MODULAR DESIGN



The modular design allows for MANTECH systems to be highly configurable and plugand-play for system upgrades and troubleshooting. Visit mantech-inc.com

**Request a Quote** 

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