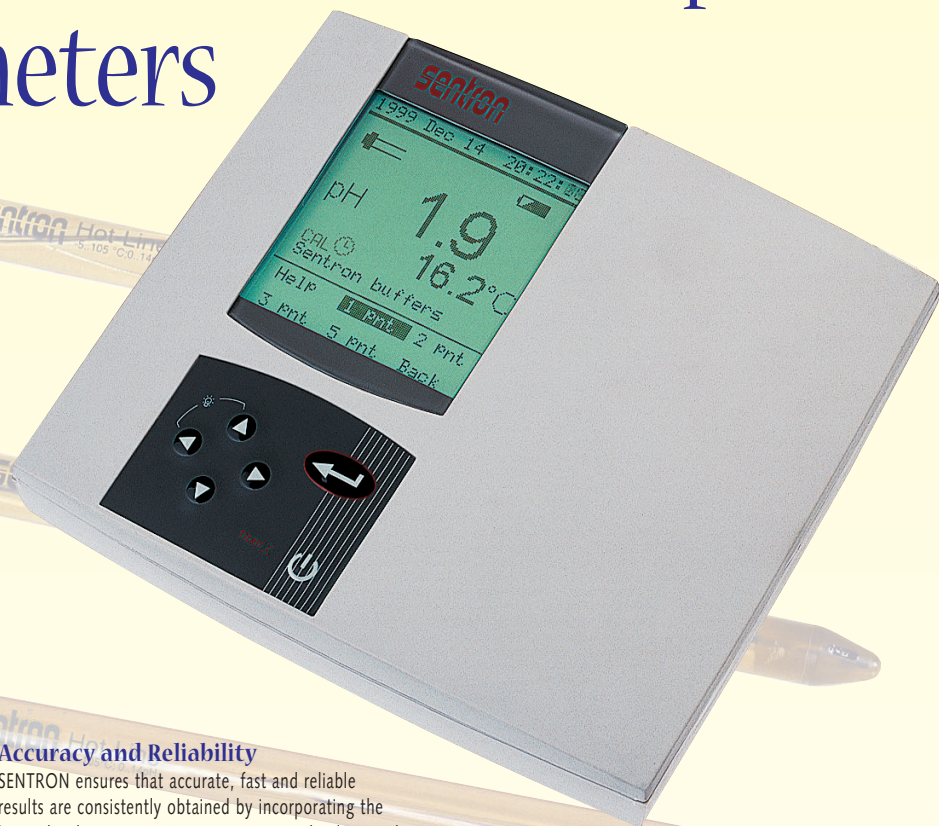


The TITAN series of benchtop ISFET pH meters

SENTRON's benchtop ISFET pH meters combine accuracy and ease of use with state-of-the-art electronics, sophisticated design and a wide variety of innovative extras.



The TITAN and TITAN χ benchtop Ion Sensitive Field Effect Transistor (ISFET) pH meters combine SENTRON's more than 10 years of experience in developing ISFET pH systems and practical application know-how with state-of-the-art electronics and data processing. TITAN and TITAN χ bring the future of pH testing to you today. Experience the ultimate in flexibility and ease of use in the lab, in the field or at the production line. These versatile meters can handle a virtually unlimited number of tasks ranging from single sample measurements to multi-point datalogging for process monitoring, quality control or research work.

LCD Graphics Display

Both instruments display pH and temperature on a clear multi-functional LCD graphics display. The display also shows items such as probe status, battery life and Help information to guide the user through the operation. The adjustable contrast makes reading in any light easy, while the backlighting of TITAN χ allows reading in even darker environments. Its real time clock displays date and time, as well as user programmable calibration reminders.

ISFET pH Probes

Combine a TITAN meter with one of SENTRON's wide range of ISFET probes for an ideal solution for your application. Most common applications can be handled with the Hot-Line high temperature series or Stream-Line flowing reference series and can also be used in applications that put high demands on the meter and probe.

Quality

Both models are designed and manufactured under stringent quality control conditions and comply fully with CE directives.

Accuracy and Reliability

SENTRON ensures that accurate, fast and reliable results are consistently obtained by incorporating the latest developments in ISFET pH sensor technology and signal processing into these state-of-the-art products. Improved Automatic Temperature Compensation (ATC) ensures reliable calibration and measurement results at any temperature. An Auto Read function guarantees accurate, stable readings by continually monitoring measurement stability. A comprehensive set of self-diagnostic functions further enhances reliability by constantly checking system status. User-programmable calibration prompts on the TITAN χ remind the user when it is time to recalibrate. This meter also offers password protection to guard against unauthorized access or accidental entries.

Ease of Use and On-Board Help

A sealed keypad and menu driven operation allow flexibility while maintaining ease-of-use. Only 5 keys are needed for operation. Calibration is easy at any temperature using the built-in Automatic Buffer Recognition and the built-in buffer tables. An on-board Help function is available to assist the user at any time during operation.

High and Low Alarms

The TITAN χ is equipped with programmable high and low pH alarms. The alarms can be used to automatically judge if sample pH values are within preset limits, indicate out of range conditions, or adjust a sample pH to a preset value. Alarm status can be indicated by an acoustic signal and/or by means of two galvanically isolated NO/NC relay contact outputs.

Data Logging and Output

Both instruments can store up to 300 measurement data points with a flexible 9-digit sample I.D. and results can be recalled onto the display. The TITAN χ also date- and time stamps the data. Results can also be uploaded to a computer and/or printer using the serial RS232 output. A galvanically isolated analogue mV output is also included for continual measurement data recording.

GLP Compliant

Performance of meter and probe is continually monitored, supported by a comprehensive set of self-diagnostic functions. A probe recognition function ensures that the system has been calibrated with the probe in use. Every calibration is monitored resulting in an updated display of probe status allowing an estimation of its remaining life.

The TITAN χ satisfies all requirements of Good Laboratory Practice (GLP). All monitoring data, including those of calibration processes, may be logged, recalled on the display and output to computer and/or printer.

Power

Power is provided by an AC adapter for bench operation and a built-in rechargeable long-life battery pack for portable use. User programmable auto shut-off functions, also for the TITAN χ display backlight option, help maximize battery life. Battery status is constantly displayed and a low battery warning appears when remaining battery life is approximately 5 hours.

sentron
INTEGRATED SENSOR TECHNOLOGY

Functional specifications:

Instrument model		TITAN	TITAN α
Measuring range	pH	0.00...14.00	0.00...14.00
	Temperature, °C (probe dependent)	0... 60 -5...105	0... 60 -5...105
	ATC, °C (probe dependent)	0 ... 60 -5...105	0 ... 60 -5...105
Relative accuracy	pH	± 0.01 + Least Significant Digit at 2- or 3-point calibration ± 0.1 at 1 point calibration	± 0.01 + Least Significant Digit at 2-, 3- or 5-point calibration ± 0.1 at 1 point calibration
	Temperature, °C	± 0.5	± 0.5
Resolution	pH	0.1 or 0.01, selectable	0.1 or 0.01, selectable
	Temperature, °C	0.1	0.1
Calibration with automatic buffer recognition		1-, 2- or 3-point	1-, 2-, 3- or 5- point
Buffer tables		DIN, NIST, JIS, SENTRON supplied NIST traceable	DIN, NIST, JIS, SENTRON supplied NIST traceable 1 set user defined.
Data logging		Up to 300 measurements of pH and temperature	Up to 300 measurements of pH, temperature, date and time. Programmable start- and interval times and total number of measurements.
Display		LCD graphics display	Backlighted LCD graphics display
Alarms			High Alarm and Low Alarm, via acoustic signal and/or NO/NC relay contacts, 24V, galvanically isolated.
Output	Serial		Galvanically isolated RS 232 with programmable baudrate
	Analogue		50mV/pH, galvanically isolated.
Environmental conditions	Temperature, °C	Measurement 5...40 storage -5...70	Measurement 5...40 Storage -5...70
	Max. humidity, R _H	measurement 85%	Measurement 85%
		storage 95%	Storage 95%



Available systems:

Meter	Description	
6000	TITAN Benchtop meter	
6100	TITAN α Benchtop meter	
System	- 00 Meter only	
	- 02 Meter with 2070-008 LanceFET probe	
	- 03 Meter with 2074-008 LanceFET with Handle Probe	
	- 06 Meter with 3000-008 Hot-Line CupFET probe	
	- 07 Meter with 3080-008 Hot-Line ConeFET probe	
	- 08 Meter with 3090-008 Hot-Line SurfFET probe	
	- 09 Meter with 4080-108 Stream-Line ConeFET probe	
	- 10 Meter with 4090-108 Stream-Line SurfFET probe	
	Power supply	1 100...120 VAC, 50/60 Hz adapter, USA/Japan plug
		2 230 VAC, 50/60 Hz adapter, Euro plug
3 240 VAC, 50/60 Hz adapter, UK plug		

SENTRON meters are warranted to be free from defects in material and craftsmanship for a period of 12 months.
SENTRON probes are warranted to be free from defects in material and craftsmanship for a period of 6 months.

All information contained in this flyer is current at the time of publication.

Our commitment to product improvement requires that we reserve the right to change equipment, procedures and specifications at any time.

sentron
SENTRON
INTEGRATED SENSOR TECHNOLOGY



Sentron Europe bv Aan de Vaart 3 Box 125 9300 AC Roden The Netherlands
Phone + 31 (0)50 5013800 Fax + 31 (0)50 5016834
E-mail info@sentron.nl Internet www.sentron.nl