The ARGUS series of portable, handheld ISFET pH meters

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

The waterproof ARGUS and ARGUS & handheld Ion Sensitive Field Effect Transistor (ISFET) pH meters are designed to meet the most exacting requirements of the professional user. Ideally suited to field and at-line use or remote-site testing, ARGUS meters make pH easy, whether testing single samples or multi-point datalogging for process monitoring and control. SENTRON meters make tomorrow's ISFET pH technology available today.

Rugged Design

ARGUS meters are designed to withstand the harshest field, industrial and laboratory environments. They are fully sealed and do not require battery replacement. The long life battery pack of the IP 65 rated ARGUS is recharged via an adapter. The advanced ARGUS $\boldsymbol{\mathcal{K}}$ incorporates a cradle that recharges the meter's long life battery pack using a unique, inductive (contactless) method. Data are easily downloaded via an infrared (IR) link between the meter and cradle, then through the cradle's RS232 port to computer or printer. There are no external contacts on the ARGUS $\boldsymbol{\mathcal{K}}$ ensuring an IP 67 (fully waterproof) rating.

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 backlighted display of ARGUS $\boldsymbol{\mathcal{X}}$ 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 an ARGUS 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 can also be used in applications that put high demands on the meter and probe.

Quality

Designed and manufactured under stringent quality control conditions, both models 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 ARGUS X 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 fully 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 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.

Data Logging and Output

The ARGUS $\boldsymbol{\mathcal{K}}$ can store up to 300 measurement data points including date and time. Start, interval, and total duration times are user programmable as well as the flexible 9 digit sample ID system. Results can be recalled onto the display and uploaded to a computer and/or printer through the instrument cradle using the serial RS232 IR link.

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 ARGUS $\boldsymbol{\mathcal{X}}$ 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.

Auto Shut-Off

A fully charged battery pack provides approximately 40 hours of normal use. User programmable auto shut-off functions, also for the ARGUS $\boldsymbol{\mathcal{X}}$ 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.



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Functional specifications:

Instrument model		ARGUS	ARGUS X
Measuring range	рН	0.0014.00	0.0014.00
	Temperature, °C	0 60	0 60
	(probe dependent)	-5105	-5105
	ATC, °C	0 60	0 60
	(probe dependent)	-5105	-5105
Relative accuracy pH		± 0.01 + Least Significant Digit	± 0.01 + Least Significant Digit
		at 2-point calibration	at 2- or 3-point calibration
		± 0.1 at 1 point calibration	± 0.1 at 1 point calibration
	Temperature, ^o C	± 0.5	± 0.5
Resolution	рН	0.1 or 0.01, selectable	0.1 or 0.01, selectable
	Temperature, ^o C	0.1	0.1
Calibration with automa	tic buffer recognition	1- or 2-point	1-, 2- or 3-point
Buffer tables		DIN, NIST, JIS,	DIN, NIST, JIS,
		SENTRON supplied NIST traceable	SENTRON supplied NIST traceable
			1 set user defined.
Data logging			Up to 300 measurements of pH, temperature, date and
			time. Programmable start- and interval times.
Display		LCD graphics display	Backlighted LCD graphics display
Output			RS232 via IR link, programmable baudrate,
			galvanically isolated on cradle.
Housing		IP 65	IP 67
Environmental	Temperature, ^o C	Measurement 040	Measurement 040
conditions		storage -570	Storage -570
	Max. humidity, R _H	measurement 85%	Measurement 95%
		storage 95%	Storage 95%









meter type		Description
5000		ARGUS Handheld Portable meter
5100		ARGUS x Handheld portable meter with cradle
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 SurFET probe
	- 09	Meter with 4080-108 Stream-Line ConeFET probe
	- 10	Meter with 4090-108 Stream-Line SurFET probe
Power supply		100120 VAC, 50/60 Hz adapter USA/Japan plug
		230 VAC, 50/60 Hz adapter, Euro plug
	:	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.



