The Hot-Line series high temperature ISFET pH probes

A complete range of high temperature rated, non-glass, ISFET pH probes, brings SENTRON's integrated sensor technology to yet a higher level.

SENTRON's high-tech Ion Sensitive Field Effect Transistor (ISFET) solid-state pH sensor, the most significant breakthrough in pH testing in half a century, is the most powerful pH testing technology available today. SENTRON's Hot-Line series of probes broadens the areas of application for this state-of-the-art technology even further.

Proven technology

This new probe family is the result of SENTRON's more than 10 years experience in developing ISFET pH probes and applications. During this period, SENTRON has proven to be the most reliable system, giving good performance in many different applications. Our probes are the culmination of an ongoing effort to further improve the quality and performance of ISFET pH technology. Most SENTRON's Hot-Line series of high temperature ISFET pH probes provide fast, safe and reliable pH testing up to 105ºC (see spec's).

Rugged non-glass design, fast response and ease of use

SENTRON ISFET probes are virtually unbreakable, replacing fragile glass electrodes with sturdy silicon microchips that deliver stable readings in less than 5 seconds for most samples.

Using heat resistant materials, an improved reference design and temperature resistant KCl reference gel, these probes function reliably at high temperatures. The clog-resistant ISFET sensor is easily cleaned using a simple toothbrush. The reference design incorporates a large surface area diaphragm of porous PTFE, significantly reducing junction contamination or clogging. Hot-Line probes are non-refillable, virtually maintenance free and can be stored dry, making them very user-friendly.

Safety

Since they are glass-free and virtually unbreakable, ISFET probes can be used safely in areas where broken glass is a hazard to the user, the sample or the environment. The patented ElectroStatic Discharge (ESD) protection provides a built-in sensor safeguard that ensures proper functioning in even the harshest field, laboratory or industrial conditions.

Quality

Designed and manufactured under stringent quality control conditions, all SENTRON probes are individually tested to the most demanding testing protocols.

Unique and versatile pH testing systems

SENTRON ISFET pH meters and probes can be combined to form a unique and versatile family of pH measuring systems. The system of choice depends on the user's needs, application, environment and data-handling requirements. The fully waterproof ARGUS portable meters are constructed to resist the harshest environments. TITAN benchtop meters are extremely suited to laboratory use as well as remote-site measurements. Both series offer the latest development in signal processing, sophisticated data-handling facilities and a wide variety of standard extras.

Complete series of ISFET probes

The use of ISFET technology allows the design of rugged, non-glass probes, incorporating the ISFET pH sensor, a reference system and a thermistor for Automatic Temperature Compensation (ATC).
The Hot-Line series consists of 5 different probe types. Although all suitable for general pH testing, each is designed for specific applications.

sentron
INTEGRATED SENSOR TECHNOLOGY

E7500143, 03 Ver. Nov. 2002

Copyright ©1999 Sentron

CupFET probe

Best suited for applications for very small volumes. In addition, its cut-out tip design allows very viscous, almost solid samples to be placed directly onto the sensor surface for testing.

ConeFET probe

The ConeFET is designed for measuring pH in viscous samples and, because of its shape, is easily cleaned. It is ideal for measuring thick, strongly contaminating or sticky samples, pulp, oil/water mixtures and water based polymer solutions. Best suited for general purpose applications.

SurFET probe

With the ISFET pH sensor and reference junction mounted on the distal end of the probe, the SurFET makes direct measurement on flat surfaces quick and easy.

LanceFET probe

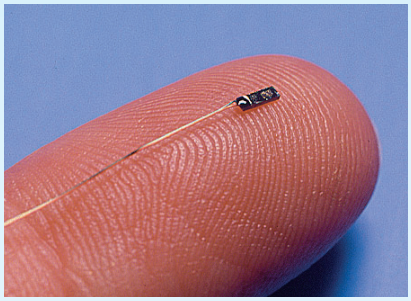
The pointed stainless steel tip of this probe allows easy penetration in dense, very viscous samples and even semi-solids. The conical shape offers the same cleanability as the ConeFET, yet with far greater penetrating capabilities.

LanceFET probe with handle

The handle ensures a firm grip for testing fatty, dense semi-solids. It is also practical when working in refrigerated or cold environments.
From routine measurements to complex applications, SENTRON has an optimal and cost effective solution for you.

- food- & food processing
- softdrinks & beverages
- water based paints, coatings & inks
- pulp & paper
- pharmaceuticals & cosmetics
- printing
- agriculture
- chemical industry
- environmental monitoring

These are just a few areas where ISFET pH systems make testing easier and improve efficiency.
SENTRON systems are the answer to pH measurement needs in research, production, QA/QC, waste management and many other applications.



Specifications:

Hot-Line high temperature series

Part number	Description	pH range	Temperature range	Reference type
3000-008	CupFET probe	0...14	-5...105°C	Non flow, gelled, PTFE diaphragm
3080-008	ConeFET probe	0...14	-5...105°C	Non flow, gelled, PTFE diaphragm
3090-008	SurFET probe	0...14	-5...105°C	Non flow, gelled, PTFE diaphragm
2070-008	LanceFET probe	0...14	0...60°C	Non flow, gelled, PTFE diaphragm
2074-008	LanceFET probe with Handle	0...14	0...60°C	Non flow, gelled, PTFE diaphragm

Other ISFET pH probes available from SENTRON
Stream-Line series:
Probes with refillable flowing reference specially designed for low conductivity applications or highly concentrated or contaminating samples.
Suitable for temperatures up to 105°C.

Part number	Description	pH range	Temperature range	Reference type
4080-108	ConeFET probe	0...14	-5...105°C	Refillable, flow, PTFE diaphragm
4090-108	SurFET probe	0...14	-5...105°C	Refillable, flow, PTFE diaphragm

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
INTEGRATED SENSOR TECHNOLOGY

DNV
ISO 9001

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