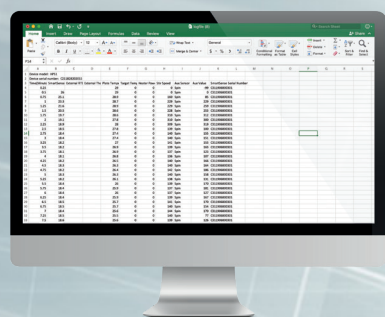# GATE SCIENTIFIC

smartSENSE®

Temperature and spin sensing stir bars
WiFi Digital Programmable Hotplate Stirrer

The world's first wireless hotplate stirrer system for temperature and spin sensing consists of the growing selection of wireless sensing stir bars and the smartSENSE® WiFi digital programmable hotplate stirrer.

SmartSENSE® wireless stir bars

- Tight thermal control with dual temperature sensing and management of hotplate
- Verification & documentation of actual spin rate with True Spin™
- Wireless connectivity for remote monitoring & control and download of data logs
- System integrateable and lab automation ready

Endless applications

Ideal for inert or controlled atmosphere reactions or processes, effortless tracking and download of data in regulated and GMP environments, in closed or hard to access setups, QC, process development/pilot manufacturing and lab automation

Monitoring, control and data download from anywhere

The chemical base station, with integrated RFID reader, is software upgradeable to support the addition of new sensing capabilities.

Real-time measurement data from the stir bar to the hotplate stirrer to maintain programmed setpoint

Specifications smartSENSE® WiFi Digital Hotplate Stirrer:

Temperature range: 20-400degC/752degF
Communication: WiFi, USB, RFID and Ethernet
Stirring speed: 60-1000RPM
Plate dimensions: 7x7in
Power supply: 120V 60Hz
Accessible for lab automation, remote monitoring & control
Software upgradeable to support future sensing features

Specifications smartSENSE® Stir Bars:*

Temperature range: 0-100degC/32-212degF
Length: 40mm/1.6in and 75mm/3in
Material: Solvent resistant EFEP Fluoropolymer
Power & Communication: Wireless RFID
Temperature: Dual sensors
Sensing features: Temperature, Temperature & Spin
*See datasheet for further details

Gate Scientific, Inc. Milpitas, CA.   www.gatescientific.com   i@gatescientific.com
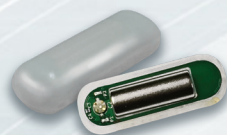
smartSENSE® Specifications

Wireless temperature, spin and pH sensing stir bars
WiFi Digital Programmable Hotplate Stirrer
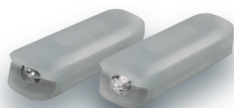
smartSENSE® Stir Bar Temperature

Temperature range: 0-100degC/32-212degF
Length: 40mm/1.6in and 75mm/3in
Magnet: Neodymium
Power & communication: Wireless RFID
Temperature: Dual sensors
Material: Solvent resistant EFEP Fluoropolymer
Accuracy: +/- 1degC
Read distance: 1.4in
Onboard memory for ID and calibration

smartSENSE® True Spin™ Temperature & Spin

Temperature range: 0-100degC/32-212degF
Spin accelerometer: 60-1000RPM
Length: 40mm/1.6in
Magnet: Neodymium
Power & communication: Wireless RFID
Temperature: Dual sensors
Material: Solvent resistant EFEP Fluoropolymer
Accuracy: +/- 1degC
Read distance: 1.4in
Onboard memory for ID and calibration
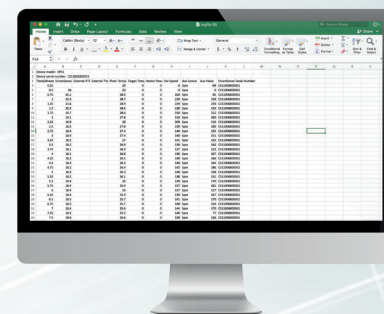
smartSENSE® Stir Bar Temperature & pH

In beta

Temperature range: 0-100degC/32-212degF
Sensor pH range: 0-14
Length: 40mm/1.6in
Magnet: Neodymium
Power & communication: Wireless RFID
Temperature: Dual sensors
Accuracy: +/- 1degC and pH +/- 0.002
Read distance: 1.4in
Onboard memory for ID and calibration

smartSENSE® WiFi Digital Programmable Hotplate Stirrer:

Temperature range: 20-400degC/752degF
Communication: WiFi, USB, RFID and Ethernet
Stirring speed: 60-1000RPM
Plate dimensions: 7x7in
Power supply: 120V 60Hz
Instrument weight: 2.1kg/4.6lbs
Connections: TC and RTD External temperature probe

Features

Accessible for lab automation, remote monitoring & control
Software upgradeable to support future sensing features
Remote access and download of data logs

Part #	Description
00102	smartSENSE Control Station / Digital Prog Hotplate Stirrer, 115V
00202	smartSENSE® Temp Stir Bar, 40mm
00204	smartSENSE® True Spin™ Temp & Spin Stir Bar, 40mm
00206	smartSENSE® Temp Stir Bar, 75mm