# **thermo**scientific



Where automation meets accuracy



# Facilitate optimal patient outcomes with the power of AST automation

Confidently identify bacterial pathogens and detect emerging antibiotic resistance with the gold-standard level accuracy of broth microdilution combined with the time-saving benefits of automation to optimize patient care, support antimicrobial stewardship, and improve lab efficiency.

With a proven history of AST accuracy, the Sensititre System delivers accurate antimicrobial susceptibility testing (AST) for the most commonly prescribed antibiotics as well as novel, last-resort therapies.

Join the growing movement towards automated broth microdilution. While many AST systems rely on generating minimum inhibitory concentration (MIC) values based on extrapolated data calculated from historical data sets, the

Sensititre System utilizes gold standard-level MIC accuracy, providing superior quality and reproducibility for accurate results the *first* time. Reduce the number of re-tests and confirmatory tests required, saving time, and decreasing costs, and report results with more confidence.

Choose from a full range of standard AST plates to use with the Thermo Scientific™ Sensititre™ ARIS HiQ™ System or design your own customized plate tailored to your formulary with access to over 300 antimicrobials and broad dilution ranges.





# Equipped to help your laboratory deliver efficient, accurate results for critical decisions

The new Sensititre ARIS HiQ System includes a number of features designed to optimize your workflow:



 Walk-up usability—Immediate and easy operation with intuitive integrated LCD touchscreen user-interface. Access critical test information 24/7 with very little training.



• Timely results—Integrated Thermo Scientific™ OptiRead™ technology automatically reads Sensititre microtitre plates at the time specified during plate setup in SWIN Software, giving you peace of mind.



 Load and leave—Automated reads deliver worry-free results. Streamlined workflow with flexible load/unload capabilities via removable plate racks, enhanced loading and batch load/unload functions.



• LIS connectivity—Sensititre software can be interfaced to most LIS systems and our service and support teams have the technical expertise to support you through this process.



• Efficient plate handling—A total of 100 Sensititre plates can be loaded into the Sensititre ARIS HiQ Instrument at any one time. An internal robotic arm works in tandem with advanced plate sorting algorithms to optimize read times and enable efficient plate removal.



Standard and custom AST options—
 Choose from a wide range of standard
 AST plates, or create your own plates
 tailored to your formulary, dilution ranges
 and local patient population.



Enhanced integration

Barcode
reader seamlessly links your plates to
the Thermo Scientific™ Sensititre™ SWIN™
Software System to manage plate
handling, reading and reporting.



Large capacity, small footprint—
 Process more tests at one time while conserving valuable bench space.



# **Customized formats for every AST workflow**

Sensititre custom plate capabilities enable you to tailor AST to your antimicrobial formulary and patient population, supporting antibiotic stewardship protocols. In four simple steps, our team of experts will guide the customization process, helping you achieve relevant AST results that are based on real-time resistance trends and local epidemiology, improving clinical success and effectively managing antimicrobial resistance (AMR).



Design

Choose antimicrobials and dilution ranges tailored to your formulary requirements and local patient or animal populations



**Approval** 

Rigorous review and approval process based on quality and regulatory standards helps ensure the plates meet your exact specifications and industry standard guidelines



Order

Following approval and receipt of a purchase order, your Sensititre custom plates will be scheduled for manufacture



**Delivery** 

Every custom plate comes complete with the required Sensititre SWIN Software script specific to your design to ensure results are reported with correct interpretive criteria



### First-to-market antimicrobials

Through close collaboration with many leading pharmaceutical companies, the Sensititre System offers one of the widest, most up-to-date selection of antimicrobials—enabling earlier access to critically-important last-resort and novel therapies for multi-drug resistant infections like meropenem/vaborbactam, cefazidime/avibactam, ceftolozane/tazobactam, plazomicin, omadacycline, and eravacycline.



### **SWIN Software for centralized reporting**

The Sensititre ARIS HiQ System is designed for use with the Sensititre SWIN Software System (version 3.4 or later) which work together to read and interpret up to 100 Sensititre plates, generating MIC and breakpoint (BP) results.

SWIN Software combines manual and automated read options on a single, robust software platform, to easily consolidate your test program and streamline data entry.

- Customizable Expert System provides three-tiered expert messages: Information, Modification (based on FDA, CLSI and EUCAST recommendations) and Warning Levels
- Quality control module to easily manage MIC results and broth information for auditing purposes
- Automated alerts and report functionality to enhance workflow and expedite release of results

Additionally, you can easily track and monitor local antibiotic resistance trends with comprehensive reporting options in the SWIN Epidemiology Module. Generate complete, real-time reports and bar graphs to support your antimicrobial stewardship program and facilitate critical decisions on optimal empiric treatment protocols and formularies within your institution.



# Scalable AST automation for low- to high-volume testing

Meeting the unique testing demands of all laboratory sizes and volumes, you can choose from a variety of manual and automated options with the Sensititre System.

## Select Plate

# Inoculum Inoculate



#### Sensititre Standard AST

Plates—choose from our wide selection of standard plates to suit your application, including Gram positive, Gram negative, fastidious, mycobacteria, yeast and single-drug formats.



### **Sensititre Custom AST**

Plates-design your own plate from our selection of over 300 antimicrobials. We offer one of the widest, most up-to-date selections of antimicrobials, available in wide dilution ranges.



Thermo Scientific™ Sensititre™ Nephelometer–a simple solution to automate inoculum density measurements and standardize

inoculation preparation.



Thermo Scientific<sup>™</sup> Sensititre<sup>™</sup> 8-Channel Programmable Pipette–

quick and accurate manual inoculation of microtitre plates, with enhanced ergonomics.



Thermo Scientific™ Sensititre AIM™ Automated Inoculation Delivery System—automatically doses Sensititre plates and eliminates skipped wells and costly repeat tests.





# Incubate Read Interpret



Sensititre ARIS HiQ System-individually incubates 100 MIC, breakpoint or identification plates, ensuring optimal growth conditions and eliminating repeat tests.



Sensititre ARIS HiQ System— automatically incubates and reads of up to 100 Sensititre ID and AST plates to improve lab efficiency without sacrificing accuracy.

Sensititre OptiRead



Automated Fluorometric
Plate Reading System—
utilizes fluorescence detection
technology to automate
Sensititre plate reading,
delivering fast, accurate
results, and directly linking
to the Sensititre SWIN
Software System to automate
interpretation and result
reporting.



Thermo Scientific™ Sensititre™ Vizion™ Digital MIC Viewing System—captures and stores easy-to-read digital plate images for optimized manual reading and traceability and connects to the Sensititre SWIN Software System for automated interpretation and reporting of results.



Thermo Scientific™ Sensititre™ Manual Viewer–perform simple visual reads of your 96-well microtitre plates with our mirrored viewbox.



Sensititre SWIN Software System, Complete—consolidates Sensititre results from manual and automated reading options on a single software platform.



Sensititre SWIN Epidemiology Module—provides comprehensive reporting of AST results to help detect, monitor, and investigate local antibiotic resistance patterns to facilitate decision-making and support antimicrobial stewardship programs.

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# Exceptional Service and Support

Set your lab up for success and ensure maximum productivity with a Thermo Scientific™ Extended Service Agreement.

Versatile, flexible service solutions are available for all Sensititre instrumentation and Thermo Fisher Scientific is equipped to deliver a variety of global services to keep you up and running. From preventative maintenance and corrective services to continued application assistance provided by technical scientists, get tailored solutions and exceptional support from the experts in microbiology.

Ordering info		
Product name	Part number	Description
Sensititre ARIS HiQ System	V4000	Automated incubation, reading, interpretation, and reporting
Sensititre OptiRead System	V3030	Automated reading, interpretation, and reporting
Sensititre Vizion System	V2021	Software-assisted manual reading, automated interpretation and reporting
Sensititre AIM System	V3020	Automated plate inoculation
Sensititre Nephelometer	V3011	Automated turbidity measurement
Sensititre SWIN Software System	SW4000	Automated interpretation and reporting
Sensititre SWIN Epidemiology Module	SW120	Optional reporting module

Growing numbers of healthcare professionals are choosing the Sensititre System for industry-recognized MIC accuracy. With MIC results equivalent to the gold standard, clinicians can confidently select the most effective antibiotics to improve patient outcomes while safeguarding the future of patient care by reducing the emergence of AMR.

### Reference

1. Gram negative anaerobe susceptibility testing in clinical isolates using Sensititre and Etest methods. C. Hughes, C. Ashhurst-Smith, J.K. Ferguson. *Pathology* Volume 50, Issue 4, June 2018.

To learn more about how your laboratory can achieve MIC results equivalent to the gold standard while improving workflow with the power of automation, visit **thermofisher.com/arishiq** 

#### Intended use

The Sensititre ARIS HiQ System, the SWIN Software System, and instructions for use are for the sole use of trained laboratory personnel for clinical, veterinary, industrial, and research use applications. When used in a clinical setting, the intended use is:

The Sensititre ARIS HiQ System is part of the Sensititre System and is an automated read and incubation instrument for overnight (18–24 hours) in vitro antimicrobial susceptibility testing of microorganism pathogens.

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The Sensititre ARIS HiQ AST System is not yet available in all territories. Please contact your local Thermo Fisher Scientific Microbiology sales representative for more information.