

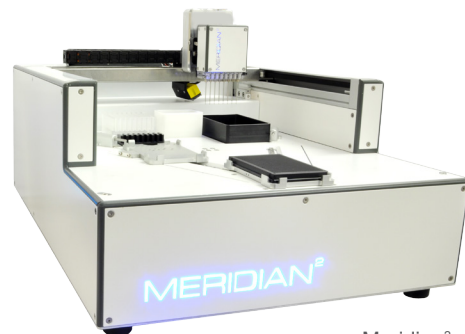


Meridian²

For research use only. Not for use in diagnostic procedures.

Meridian² – liquid dispensing system

The Meridian²™ liquid dispensing system provides a non-contact, on-the-fly dispenser suited to a wide range of dispensing applications, including reagents for genotyping and standard PCR. Originally developed to increase throughput and add efficiency to our own high-volume genotyping service laboratories, the Meridian system is now utilised in our customer laboratories worldwide.



Meridian²

Efficient and accurate dispensing with increased throughput

- Process time to dispense 1 µL reagent into a 1536-well plate is less than 45 seconds*
- High dispensing volume accuracy of <5 % CV at 1 µL
- Dispensing volumes from 1 µL to 50 µL in a standard configuration
- Vacuum-based 8-channel aspiration system allowing multi-plate dispense
- Innovative tip design provides both strength and cost efficiency
- Non-contact dispense eliminates potential for cross contamination to remove the requirement for disposable pipette tips
- Enhanced motion control to ensure greater accuracy and control of dispense tip positioning
- Integrated tip wash station
- Automated mixing of assay and master mix or manual option available
- Two plate positions, active working plate and load/unload plate, to increase throughput

Intuitive user interface

- Full software control with simple to use interface
- Control PC with either an intuitive graphical user interface, or integrated into our proprietary Kraken™ software for ease of use and simplified pattern dispensing via dropdown menu selection
- Increased error control and data tracking with integrated 1D linear barcodes in Unicode 0128 format for plates and 2D datamatrix barcode reading for up to 16 assay tubes
- Simple pattern dispensing with easy-to-use software
- Integrates seamlessly into LGC's SNPLine™ for automated solution

Plate density	Dispense volume	Dispense type	Single plate		16 sequential plates	
			Total time MM:SS ¹	Plate dispensing only MM:SS ²	Total time MM:SS ¹	Average time/plate MM:SS ¹
96	5 µL	1 tip-full	3:00	0:24	22:00	1:13
		8 tip-strip	1:45	0:03	7:45	0:29
384	3 µL	1 tip-full	3:55	1:00	46:00	2:53
		8 tip-strip	2:00	0:08	8:50	0:33
1536	1 µL	1 tip-full	4:55	1:45	68:00	4:15
		8 tip-strip	2:10	0:14	11:15	0:42*

¹ All times are recorded from the first plate being loaded onto the Meridian², to the last being removed. Times include the Meridian² automatic assay preparation with x3 master mixes. Also barcode scanning was enabled.

² All dispensing times are recorded from the first well to the last well.

Enhancements from Meridian:

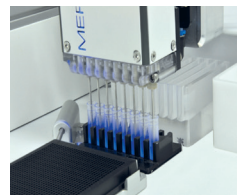
- Vacuum-based aspirate system for multi-plate dispense with increased accuracy
- Enhanced motion control for more accurate positioning of dispense tips
- Integrated barcode reading
- Automated mixing of assay and master mix
- Two plate positions for enhanced efficiency and throughput

Meridian² specifications

INSTRUMENT DIMENSIONS	Depth: 73.0 cm (28.7") Width: 52.5 cm (20.7") Height: 42.5 cm (16.7") plus 15" PC
INSTRUMENT WEIGHT	Approx. 35 kg (77 lbs)
ELECTRICAL REQUIREMENTS	120/220 V, 15/13 A
KRAKEN REQUIREMENTS	If used with Kraken, Kraken version 15.6.6.14265 or above is required for full functionality
SPECIAL INSTRUCTIONS/ REQUIREMENTS	Reverse Osmosis (R.O.) Water: 2 L for setup (approx. 2 L/day) (preferred) <u>Standard Minimum Grade</u> ASTM Standard (ISO 3696) Type III ISO Standard Grade 3 Clinical Laboratory Standards Institute (CLSI - CLRW) Type 3 <i>Note: Commercial/industrial R.O. water systems typically meet these requirements</i> DI Water Compressed air: 6 bar (90 psi) at 50 L/min Provided with PC/software
DISPENSE SYSTEM	Mechanism: pressure/vacuum based, single solenoid micro-valve Channels: 8 Aspiration capacity: 4 mL per channel Volume range: 1-50 µL Accuracy CV: <5 % at 1 µL
CERTIFICATIONS	

Ordering information

Catalog number	Description
KBS-0011-001	Meridian ² - liquid handling system
KBS-0025-003	1-dimensional handheld barcode scanner
KBS-8002-004	Decontaminate MicroSol 4 Concentrate 1 L
KBS-8002-005	Decontaminate MicroSol 4 Concentrate 500 mL
KBS-0099-034	4 litre oil-free compressor
KBS-0900-027	Meridian ² 12-month Service Contract



Meridian² dispense head



Consistent data sets using Meridian²

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