SHIMADZU
Excellence in Science

Upgrade for the MALDI-8000 Series MALDI-TOF mass spectrometers

MALDI EasyCare

Routine maintenance in your hands

...MALDI EasyCare

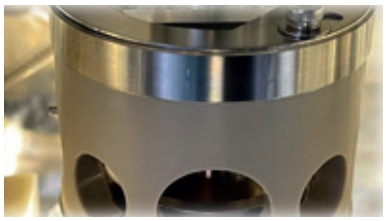
Designed for your benefit…

- Perform routine maintenance of your system*
- Reduce service engineer call-outs
- Reduce costs
- Increase uptime

Uptime ↑ *more productivity*

…ideal for MALDI imaging and high-throughput applications

*Please wear appropriate protective equipment (mask, goggles and gloves), when you do customer maintenance.



MANUAL SOURCE CLEANING

EASILY REMOVE, CLEAN AND RE-FIT ION OPTICS

- Easy access to contaminated ion optics to recover instrument performance
- Tool-less opening of ion optics access panel
- Safety guaranteed with interlocks
- Step-by-step guidance in software

- Easy removal/re-fit of ion optics using simple twist action
- No technical expertise required - ion optics fits only one way

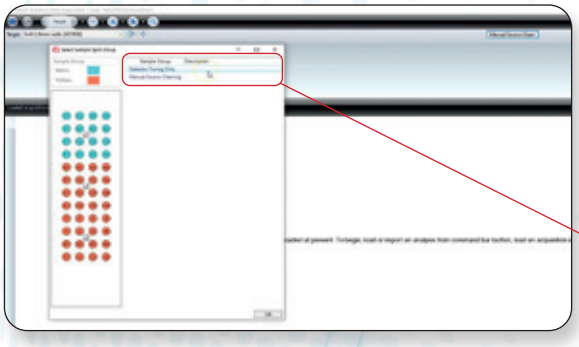
- Easy cleaning of ion optics
- Simple wipe process
- No sonication required
- Only front lens cleaning needed

Easy workflow to increase your uptime

In all MALDI-TOF instruments, the ion optics which accelerate the ions towards the detector are susceptible to contamination as a result of the MALDI process. Such contamination can lead to reduced instrument performance. The Shimadzu MALDI EasyCare solution offers a convenient way to perform routine maintenance on your system and increase your uptime.

AUTOMATED TUNING

SOFTWARE WIZARD TUNES DEFLECTORS AND DETECTOR FOR YOU



- Full guidance by software wizard
- Two workflow options for convenience: detector tuning only and full (manual clean) workflow

- Step-by-step guide with graphics ensures you cannot go wrong
- Progress table keeps you updated

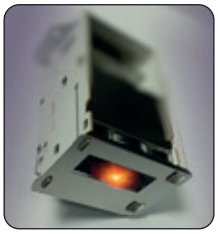
- Full workflow (~2.5 hrs)

Manual source clean

AUTOMATED

Deflector tuning

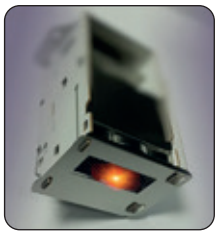
AUTOMATED



Detector tuning

- Detector tune only workflow (~20 mins)

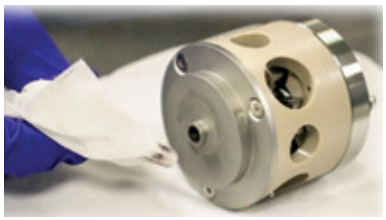
AUTOMATED



Detector tuning

Guided workflow

Full guidance by software wizard which automatically tunes system to optimise instrument performance. No technical expertise required.



MALDI-8000 series

A LEGACY OF CLASS-LEADING PERFORMANCE

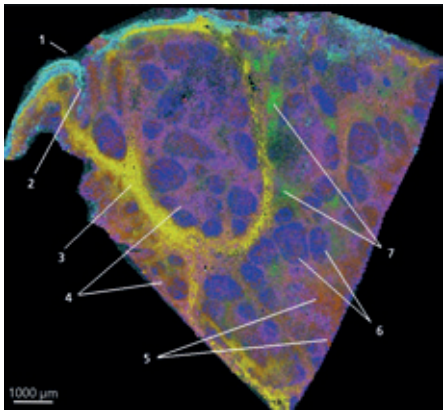
Upgradeable flexibility without compromise...

The updated Shimadzu benchtop MALDI instruments retain the same class-leading performance as the previous models, ensuring good mass resolution and sensitivity for your analysis. Easily upgrade MALDI-8020™* and the dual-polarity MALDI-8030™* with MALDI EasyCare through a software licence activation.

*EasyCare-ready versions only

MALDI-8020 | MALDI-8030 | MALDI-8020 EasyCare | MALDI-8030 EasyCare

Outstanding value for MALDI Imaging…



C. Jones (2023), IMSIS poster 46

Immunohistochemistry MALDI mass spectrometry imaging (IHC-MALDI MSI) of human tonsil using 6 probes in a single analysis to monitor high molecular weight protein biomarkers.

Experiment details: 26773 profiles acquired at 200 Hz laser speed over duration of 3 hrs 45 mins in positive ion mode at 50 µm spatial resolution on MALDI-8020. Matrix deposition with Shimadzu automated sublimation device iMLayer using DHB MALDI matrix.

6-plex markers: VIM(Vimentin), CD68, CD3ε, Collagen-1A1, Ki67, PanCK.
Probes provided by AmberGen.

1. Stratified squamous epithelium
2. Crypt
3. Extracellular matrix
4. Lymphoid tissue
5. Macrophage distributions
6. Lymph nodules containing geminal centre cells
7. Cytoplasmic T-cell distributions

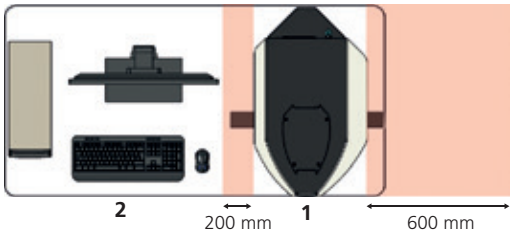
Specifications	
Mass range	m/z 1 - 500,000
Mass resolution	>5000 FWHM – ACTH 18-39 (m/z 2465)
Accuracy	<20 ppm with internal calibration <150 ppm with external calibration†
Sensitivity	250 fmol – bovine serum albumin (loaded) 250 amol – Glu-1-Fibrinopeptide B (loaded)
Size (w x d x h)	450 mm x 745 mm x 1055 mm [17.7" x 29.5" x 41.5"]
Incl. stabiliser	600 mm x 745 mm x 1055 mm [23.6" x 29.5" x 41.5"]
Weight	92 kg

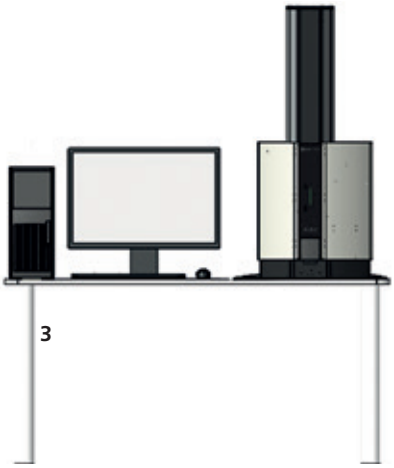
† Nearest neighbour external calibration on FlexiMass-SR48 target, within 30 minutes
All performance data are acquired using standard test samples on a FlexiMass-SR48 stainless steel target.

Installation requirements		
Utilities	**Power**	100 to 240 VAC, 50/60 Hz, 1000 VA single phase
		A 'clean', stable and continuous mains supply is required for reliable operation
Environment	**Temperature range**	ambient 18°C to 28°C for performance
		ambient 15°C to 32°C for operation
	Relative humidity	less than 70%, non-condensing

Installation Example

No.	Description	Dimensions (mm)			Weight (kg)
		W	D	H	
1	MALDI benchtop	600 mm	745 mm	1055 mm	92 kg
2	Control PC, monitor, keyboard and mouse (reference)	~850 mm	~550 mm	~500 mm	~10 kg
3	Table (reference)	1500 mm	750 mm	750 mm	





MALDI-8020 and MALDI-8030 are trademarks of Kratos Analytical Ltd.
iMLayer is a trademark of Shimadzu Corporation

Discover more

Kratos Analytical Ltd., a Shimadzu Group company
Wharfside, Trafford Wharf Road, Manchester M17 1GP, UK
Phone: +44 161 888 4400 Fax: +44 161 888 4402

SHIMADZU

Shimadzu Corporation
www.shimadzu.com/an/

For Research Use Only. Not for use in diagnostic procedures.
This publication may contain references to products that are not available in your country. Please contact us to check the availability of these products in your country.
Company names, products/service names and logos used in this publication are trademarks and trade names of Shimadzu Corporation, its subsidiaries or its affiliates, whether or not they are used with trademark symbol "TM" or "®".
Third-party trademarks and trade names may be used in this publication to refer to either the entities or their products/services, whether or not they are used with trademark symbol "TM" or "®".
Shimadzu disclaims any proprietary interest in trademarks and trade names other than its own.

The contents of this publication are provided to you "as is" without warranty of any kind, and are subject to change without notice. Shimadzu does not assume any responsibility or liability for any damage, whether direct or indirect, relating to the use of this publication.

© Shimadzu Corporation 2024 Second Edition: January 2024, Printed in UK MO499