

MTS-32 Pro™

Specification sheet

MTS-32 Pro is a programmable multi-tube sequential sampler, for automated, time-resolved air sampling of volatile organic compounds (VOCs).

Define variable sampling periods and intervals between samples, allowing sequences to be tailored to environments where concentrations fluctuate over time. This flexibility ensures that both immediate and longer-term trends are accurately captured. Subsequent analysis of sampled tubes with TD-GC-MS enables characterisation within a single, automated workflow, providing deeper insight into VOC behaviour.



System features

Automated sampling on up to 32-sorbent tubes:

Compatible and configured for either:

- Industry standard 3.5" length x 0.25" O.D. tubes
- Mini Gerstel 60 mm length x 6 mm O.D. tubes.

Customisable sampling protocols: intuitive software for setting and saving the sampling duration and dwell times to individual tube positions, easily uploaded to the MTS-32 Pro via a USB connection.

- Adjustable from 0.01 minute to 4 hours per tube.

In-built constant flow control ensures a consistent sampling flow rate onto all tubes.

- Settable from 20 mL/min up to 1L/min*.

Sample security: To avoid both diffusive ingress of atmospheric contaminants and loss of retained volatiles, tubes are sealed with high flow micro-check valve caps. These specially designed caps allow for sampling up to 1L/min without requiring removal.

Easy-to-use: External start and stop buttons.

Portability: Compact and durable design with an integrated carry handle for easy transport between indoor sampling locations.

System Specifications

Dimensions H 24 cm (9.4") x W 30 cm (11.8") x D 25 cm (9.8").

Weight 9 kg (19.8 lb) (when loaded with sample tubes)

Tubes accommodated:

- 3.5" x 0.25" industry standard tubes, pre-fitted with model **MTS-32-Pro-0.25**
- 60 mm x 6 mm mini-tubes (GERSTEL), pre-fitted with model **MTS-32-Pro-6mm**

Ambient operating conditions

Temperature 5°C to 40°C.

Environment Indoor use only

Relative humidity 20 to 80% RH (non-condensing).

Altitude Up to 2000 m (~6500 ft).

* Sampling flow rates of 1 L/min may not be attainable under all operational conditions. Factors affecting the maximum sampling flow rate will include the type of sorbent tube packing used, including sorbent impedance, inclusion of frits, or inclusion of SafeLok inserts.

Power requirements

Voltage: 100-240 V,

Frequency: 50-60 Hz

Maximum power: 18 W

The MTS-32 Pro is supplied with a mains power cable only.

The unit can be operated using a suitable power bank.

Please contact Markes to discuss your requirements.

Safety and regulatory certifications

The instrument is designed and manufactured under a quality system registered to ISO 9001.

The instrument complies with the essential requirements of the following applicable European and North American Standards and carries the CE/UKCA/UL/CSA marks:

- Low Voltage Directive 2014/35/EU.
- EMC Directive 2014/30/EU.
- ROHS Directive 2015/863/EU

The instrument conforms to the following product safety standards:

- IEC 61010- 1:2010
- IEC 61010-1:2010/AMD1:2016
- IEC 61010-2-081:2019
- UL 61010-1 3rd Edition,
- UL 61010-2-081 3rd Edition,
- CAN/CSA-C22.2 No. 61010-1-12,
- CAN/CSA C22.2 No. 61010-2-081:19

The instrument conforms to the following regulation on electromagnetic compatibility (EMC):

- EN 61326-1:2021

System options

Tube conversion kits are available to change the size of tube that can be inserted into the MTS-32 Pro:

- **MTS-PRO-CONVERT-6mm** Conversion kit to fit 6mm O.D. tubes in MTS-32 Pro
- **MTS-PRO-CONVERT-0.25** Conversion kit to fit 0.25" O.D. tubes in MTS-32 Pro

For more information about our products and services, please visit www.markes.com

Trademarks

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