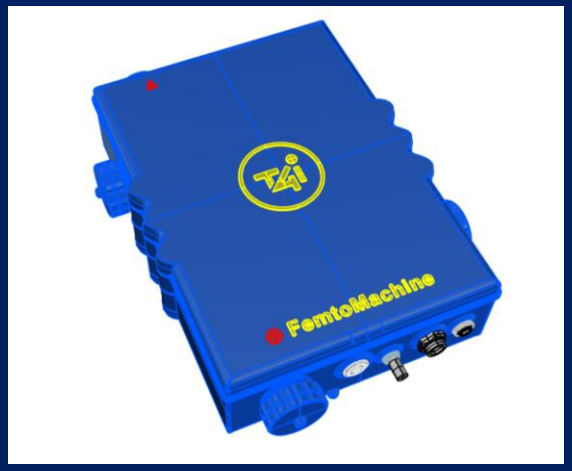

What it is

T4i FemtoMachine PRO is NIST and UKAS traceable calibrator. A credible, robust, handheld vapour generator designed to produce constant vapour plumes of chemicals (TICs/VOCs) in the lab and outdoors.

How it works

T4i FemtoMachine PRO produces continuous TICs/VOCs vapour plumes at pre-defined, fully controlled concentration levels. No use of pressurized gas cylinders is needed.

T4i FemtoMachine PRO uses standard permeation tubes for a broad range of TICs and VOCs. The user uploads a method for unattended production of pre-selected stable concentration.

Contact Us

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T4i FemtoMachine PRO

equipped with Symbiotic Engine

for calibration and testing of chemical detectors and sensors anywhere anytime

Hand-portable, battery-powered ppb to ppm vapour generator

Speed and simplicity

Operation in 2 simple steps

- *Turn power on*
- *Upload calibration method*

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Specifications

Vapours	
Type of compounds	Broad range of TICs and environmental VOCs and gases
Mixture generation	2 – 4 components
Analytical	
Concentration range	Low ppb to high ppm
Permeation rate accuracy	Certified tubes <2% non-certified tubes <25%
Concentration repeatability	<3% for high ppb <10% for low ppb
Output flow	200-1500 mL/min
Output flow repeatability	1%
Versatility	
Connection with sensors, detectors, analyzers and Tedlar® bags	Threaded (M5) outlet port
Capability of sampling with syringe	Special proprietary technology septum nut accessory
Connection with gas cylinders for gas calibration (optional)	Threaded (M5) inlet port
Higher productivity in air purification (optional)	External scrubber

Specifications

Technology	
Technique	Permeation tubes
Flow control	Microprocessor based automated electronic
Oven	Proprietary technology. Robust, inert oven heated up to 115°C (±0.1°C)
Safety	
Carrier gas	Ambient air. Does not use dangerous and costly gas cylinders
Exhaust purge	Molecular sieves trap
Physical features	
Dimensions (LxWxH)	298 x 221 x 74 mm 11.7 x 8.7 x 2.9 inches
Weight	1.98 kg (4.36 lbs)
Enclosure and protection	Rugged, IP66, sealed external connectors
Power	
Input voltage	110-240VAC w/ external power supply or 12VDC (2A max, 24W max)
Batteries	4 x Li 18650 (3.3Ah), 2h oven operation at 70°C (158°F)
Operational	
Operating °C/°F and humidity	10°C – 40°C (50°F - 104°F), RH <95%
Storage temperature	-30°C - 55°C (-22°F - 131°F)

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Specifications

Operational	
Control	One button operation, online monitoring and diagnostics
Alerts	Illuminated switch, visual and audio alerts
Maintenance	SW diagnostics for self-testing
Authentication, authorisation	Proprietary security technology
Cold start up time	30 minutes
Autonomous operation	Using Symbiotic Engine
User interface	
Software Symbiotic Engine	Proprietary technology
Training	1h, formal certified training
Communication	
Protocols	USB
Standardisation	
CE certified IPC-A-610 ISO EN6145-1:2019 ISO EN6145-7:2019	ISO EN6145-10:2019 ISO EN6143:2006 ISO EN60529:2001
Calibration Traceability	NIST, UKAS traceable

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