

## Scale MT PARS-1m

Mobile particle generator with integrated reference sensor

Constant particle size over a wide concentration range

Robust design with consistent performance



The particle-calibration-system **PARS-1m** is a portable particle generator with an internal reference detector. It is an all-in-one solution for easy and fast calibration and verification of various particle measurement instruments. Its robust construction makes it ideal for use in both laboratory and harsh workshop environments.



The **PARS-1m** generates the reference aerosol through a nebuliser nozzle and a silica gel dryer, creating solid salt particles. The desired particle concentrations can be set up to  $1 \times 10^6 \text{ \#/cm}^3$ , and is automatically adjusted. The default particle size is set at factory between 65-80 nm and is constant regardless of the selected concentration. The target concentrations are realised by an internal variable dilution system and are continuously monitored by an integrated **Dekati® ePNC™** particle number sensor. This ensures stable concentrations throughout the measurement and the lifetime of the generator. The user can select automated test procedures, and control the device via a USB interface.

### Specifications

Generated reference aerosol	solid NaCl particles
Salt solution	0.9 Vol % commercial solution
Nozzle pressure	3.5 bar
Minimum output flow	6 l/min
Warm-up time	30 sec
Max. particle concentration	$1 \times 10^6 \text{ \#/cm}^3$
Particle size distribution	
Median	65-80 nm (factory-set)
GSD	~1.6 - 1.7
Operating conditions	
Temperature	5 - 40 deg C
Pressure	860 - 1060 mbar
Humidity	5 - 95% Rel.
Dimensions (WxLxH)	272 x 502 x 370 mm
Weight (without case)	18 kg



The integrated Dekati® ePNC™ particle number sensor continuously monitors the concentration of the generated aerosol.

The PARS-1m is delivered with a dedicated carrying case - including wheels and strap (trolley function) - a plastic bottle with 1000 ml NaCl solution, a plastic bottle with 1000 ml silica gel and a removable probe tube (length 200 mm). Each device is delivered with an ISO17025 calibration certificate.