



SAMPLING
SOLUTIONS

MEGA SYSTEM

CALIBRATION
& METROLOGY

LIFETEK XP-R SERIES



- Environmental sampling at constant flow
- Automatic isokinetic sampling
- Automatic flow regulation
- Mains or Battery Powered



CARE FOR THE
ENVIRONMENT



LIFETEK XP-R SERIES

LIFETEK series environmental samplers are designed to perform sampling in compliance with European directives on health and safety in the workplace (Legislative Decree 81/2008). They are also used to sample total dust, thoracic and respirable fractions (PM₁₀ and PM_{2.5}) and asbestos fibers.

When connected to any Isocheck series processor, the XP-R versions perform automatic isokinetic sampling in compliance with EN ISO 16911-1 and EN 13284-1 standards.

The samplers are equipped with a keyboard and display for running the software with visualization and data storage. They also have a flow control device that permits automatic setting and adjustment of the sampling flow rate.

Depending on the model, a rotary or diaphragm pump is available; both guarantee high precision in flow regulation throughout the operating range.

The elevated hydraulic pump head (> 600 mmHg) and the electronic management and control system automatically compensate for pump load-loss variations due to filter clogging, and maintain constant flow rate or isokinetic flow throughout the sampling period.

Whenever an alarm situation occurs (failure to maintain constant flow rate, loss of power, etc.), the anomaly is recorded and signaled.

The volumetric meter is dry type with $\pm 2\%$ accuracy. An electronic sensor detects the air temperature sampled at the meter input for the subsequent volume normalization calculation.

The reduced dimensions and weight of all models allow easy transport even in hard to access areas.

All models in the 33 and 55 series have dual power supply, i.e. they can use a mains power source and / or external standard batteries or make use of an optional battery box.

An atmospheric pressure sensor and an ambient temperature sensor are installed in the LIFETEK 55 XP-R PM model, allowing it to carry out daily sampling of fine dust (PM₁₀, PM_{2.5}, PM₁) in INDOOR and OUTDOOR environments, by adjusting the sampling flow to environmental conditions.

The LIFETEK 100 XP-R model is also used for sampling fine dust (PM₁₀, PM₄, PM_{2.5}, PM₁) in emissions where the impactor complies with EN ISO 23210.

For LIFETEK 55 XP-R, LIFETEK 55 XP-R PM and LIFETEK 100 XP-R the dry gas meter, on request, can be certified EN 17025.



MEGA SYSTEM

TECHNICAL FEATURES

- Electronic system for AUTOMATIC load loss compensation.
- Digital vacuum gauge for measuring sampling line pressure drop.
- Digital flow setting and variation via keyboard (even during sampling).
- Automatic flow regulation (no requirement for external accessories or flowmeters)

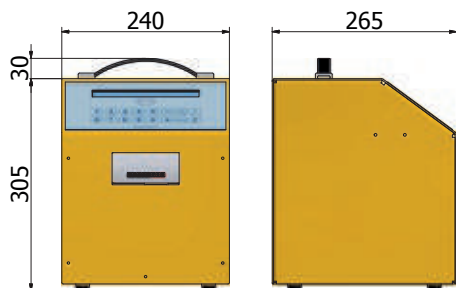
SOFTWARE FEATURES

- Constant flow ENVIRONMENTAL sampling.
- Constant flow (PM version) ENVIRONMENTAL sampling of PM₁₀, PM_{2,5}, PM₁.
- SEMI-AUTOMATIC ISOKINETIC sampling with manual parameter input.
- AUTOMATIC ISOKINETIC sampling with thermodynamic parameter detection by Isocheck series processor.

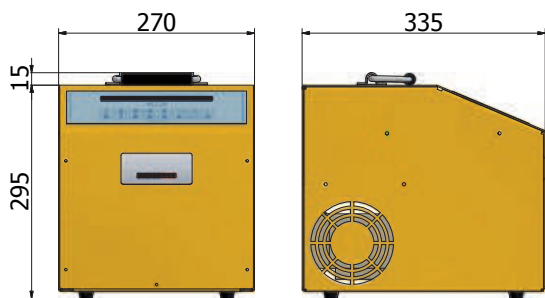


LIFETEK XP-R SERIES

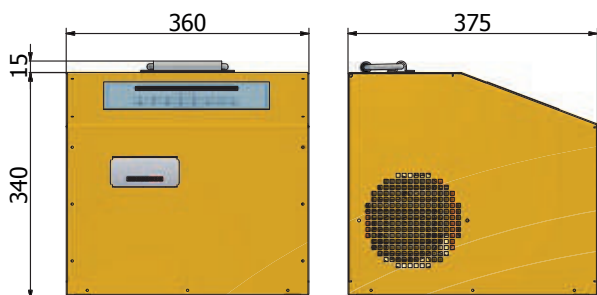
LIFETEK 33 XP-R



SERIE LIFETEK 55



LIFETEK 100 XP-R



TECHNICAL SPECIFICATIONS

MODEL	33 XP-R	55 XP-R	55 XP-R-PM	100 XP-R
Performance				
Pump type	membrane mono-head 1,8 m³/h	membrane-dual head 4 m³/h		Rotary vane 6 m³/h
Operating range	0,3 ÷ 25 l/min	1 ÷ 50 l/min		5 ÷ 70 l/min
Maximum vacuum	> 600 mmHg			
Volumetric meter/ Resolution/Accuracy	G 2,5 / 0,2 l / ±2%			G 4 / 0,2 l / ±2%
Flow	Automatic regulation			
Interface, Data Archiving				
Display	LED Alphanumeric (40x2)			
RS232 for data download to PC	✓	✓	-	✓
RS232 for connections to ISO-CHECK series	✓	✓	✓	✓
USB HOST (on Pen Drive)	-	-	✓	-
Environmental Conditions				
Working Temperature Range	0 °C ÷ 45 °C - 95% UR			
Energy				
Power	230 Vac – 50 Hz			
Power consumption	85 VA			
External batteries	12 VDC (not incl.)	24 VDC (not incl.)		-
Features				
Weight	7 Kg	11 Kg		20 Kg
Options				
Electrovalve gas inlet	-	✓	✓	✓
Dry gas meter certification EN 17025	✓	✓	✓	✓
Supplied With				
Technical Manual				
Test report				

MEGA SYSTEM