



VF NUCLEAR



NUCLEAR
POWER PLANTS



WASTE
MANAGEMENT



RESEARCH
CENTRES



INDUSTRY
& MANUFACTURING

VOPV-10

DIGITAL HIGH VOLUME AIR SAMPLER



MAIN ADVANTAGES

- High-volume air sampling in a short time
- High reliability
- Low operating costs
- Continuous operations inside and outside
- Programmable sampling intervals
- Constant airflow through the filter
- Simple controlling
- The possibility of controlling from a host system

PURPOSE

VOPV-10 is intended for air sampling on filter media with adjustable flow rate. It is used for the sampling and consequent evaluation of radioactive aerosols, particulates, and other compounds in the contaminated air. The radioactive pollutants retained on the filter can be subsequently analysed in a laboratory and the nuclide specific volume activities can be calculated.

By means of motor speed regulation, the sophisticated airflow control system provides a sustained pre-set air flow, regardless of filter fouling. The air sampler can operate in any chosen mode: occasionally, periodically and continuously.

VOPV-10 can also work in automatic mode for periodic sampling at pre-defined time intervals.

VOPV-10 is used mainly as:

- sampling unit for the operative activity measurements of aerosols and iodines in working and outdoor environment air
- sampling unit for continuous activity measurements (and reporting) of aerosols and iodines in air taken from ventilation stacks
- sampling unit in outdoor environmental monitoring stations
- sampling unit for low-energy applications

The main components of VOPV-10 are:

- centrifugal pump driven by a one-way high-speed electric motor,
- flowmeter,
- filter holder,
- control unit,
- keyboard and backlit display.

The device's display shows the instantaneous flow rate, the total sifting volume since the start of sampling, the total number of operating hours from startup, the sifted volume in the selected time interval, the temperature and pressure of the samplers, the status and error messages, and the real time.

VOPV-10

DIGITAL HIGH VOLUME AIR SAMPLER

SPECIFICATION

Available negative pressure (airflow 20m ³ /h pro K0547-30)	10 kPa
Medium junction	quick-acting couples, hose ø 32 mm
Dimensions (W × H × D)	310 × 195 × 170 mm
Weight	4,2 kg
Interface	RS-485
Power supply	24 V DC
Sample temperature range	from +5 to +40 °C
Operating temperature range	from +5 to +40 °C

TYPES OF SAMPLERS

Model	Sampler	Airflow [m ³ /h]
K0547-20	iodine, aerosols	0,1 – 0,3
K0547-10	iodine, aerosols	1 – 3
K0547-05	iodine, aerosols	2 – 6
K0547-04	iodine, aerosols	4 – 12
K0547-03	aerosols	6 – 15
K0547-30	aerosols	12 - 30

OPTIONAL ACCESORIES

K0547-50	Adapter for power input 230 V AC, 300 VA (integrated)
K0547-51	Filter holder Ø 100 for aerosols, environment sampling
K0547-52	Dual filter holder for aerosols and iodine, duct sampling
K0547-53	Filter holder Ø 140 for aerosols, environment sampling
K0547-54	Dual filter holder for aerosols and iodine, environment sampling
-	Hoses for sampled medium connection
-	Straps for easy transport



VOPV-10 with 230 VAC power adaptor



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Specification subject to change without prior written notice.

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