AMESA-D

DIOXINS, FURANS, PCB AND POP
LONG-TERM SAMPLER

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Elevating standards. For life.

The QAL 1 certified AMESA-D system is designed for the long-term sampling of dioxins (PCDD), furans (PCDF), dioxin like PCBs and other Persistant Organic Pollutants (POPs)

FEATURES AND BENEFITS

- Isokinetic sampling by a built-in Pitot tube on the sampling probe
- Fully automatic, isokinetic sampling from 15 minutes to 6 weeks (programmable)
- Complies the cooled probe method of CEN/TS 1948-5
- Adsorption on exclusive XAD-II cartridge
- Dioxins of all 3 phases (gaseous, solid and liquid bounded) are collected in one cartridge
- High efficient dust filter
- Operation by 12” TouchPanel
- Fully automated and sampling operating conditions storage
- Cooled probe composed of different materials and lengths to fit the application



COMPLIANT WITH:
QAL 1 EN 15267, EN14181

MCERTS
SIRA MC 120194/02

TÜV Rheinland
NO.0000033596_03

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TECHNICAL **SPECIFICATIONS**

General data	
Measuring range	0.0001–10 ng I-TEQ/m³ (QAL1 certification range: 0–0.5 ng I-TEQ/m³)
Sampling interval	from 6 hours up to 6 weeks
Flue gas temperature	up to 70˚C without cooling / up to 400˚C with cooling
Max dust concentration in the flue gas	100 mg/m³
Flue gas velocity	from 1 up to 30 m/s
Operating temperature (control cabinet)	+5 to + 40˚C (optional air conditioner for temperatures over +40˚C)
Max relative humidity (control cabinet)	50%
Isokinetic control cycle	1 sec
Velocity measurement accuracy	± 1% of measuring range
Volume measurement accuracy	± 1.5 % of measuring range
Capacity of internal memory	Several years of 1/2 h data

Sampling probe	
Length	from 350 up to 2000 mm
Probe shaft diameter	60 mm
Free probe tip diameter	from 3 up to 12 mm (mainly 5 and 6 mm)
Stack mounting	DN 100 flange (other flanges upon request)
Material	titanium (glass as an option)

Sampling unit	
Standard unit dimensions	600 x 600 x 220 mm (H x W x D)
Weight	approx. 32 kg
Adsorbent cartridge	XAD-2

Control cabinet	
Weight & Dimensions	1850 x 600 x 500 mm (H x W x D) approx. 185 kg

Utilities	
Compressed air	3 to 7 bars, dry, oil free
Compressed air connection	8 x 1 or 6 x 1 mm hose
Cooling water	0.5 to 5 l/min (accord. to fume temperature) (absolutely essential for fume temperature >70˚C Optional closed loop cooler if tap water not available)
Water connection	½" hose (inlet & return)
Power supply	230 VAC, 50 Hz (option 115 V, 50/60 Hz)
Power consumption	Control cabinet: approx. 0.85 kW Control cabinet with side wall air conditioner: approx. 1 kW Cartridge box: 0,25 kW
Fuse	Control cabinet: 16 A Cartridge box: 6 A

Utilities	
Digital outputs (option)	status (monitoring mode, fault, error)
Digital inputs (option)	furnace off, maintenance
Analog inputs (optional)	O_2, CO_2, flue gas velocity, -temperature, static pressure
Analog outputs (optional)	flue gas velocity, flue gas temperature, static pressure, availability
Power supply	230 VAC, 50 Hz (option 115 V, 50/60 Hz)
Digital communication to Data Acquisition System (DAS) with MODBUS communication	

Disposal	
Flue gas recycling	8 x 1 mm hose
Condensate drain	8 x 1 mm hose
Condensate quantity	approx 3 l/day (depending on flue gas moisture content)

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AMESA-D Datasheet
AMESA-D Dioxins, furans, PCB and POP emmission permanent sampler
Specifications subject to change without notice.

ISO 45001:2018
ISO 14001:2015
ISO 9001:2015
CERTIFICATION