

Ankersmid Portable system Series APS

Application

The portable gas conditioning system **APS** has been designed so that detailed gas analyses can be carried out at any time and in any place.

The entire gas conditioning system is housed in a compact and robust carrying case which ensures that the components can be removed easily and gas analyses carried out quickly, safely and with minimum maintenance.

Description

The portable system is suitable for variable, discontinuous and continuous operation. The components built into the system can be used for standard applications. For special requirements please ask us for other solutions.

The heated sample line is to be mounted at the gas measuring inlet terminal inside the portable case.

A ball-valve can be fitted to the inlet terminal of the portable system in order to calibrate analyser(s) with check gas.

The amount of flow is determined by a sample gas diaphragm pump.

The sample gas pump AMP 11P is activated automatically by means of an excess temperature contact on the cooler.

Optional flow meters with integrated needle valve are available. The flow meters are built-in as the electronic controller and are visible from outside when the carrying case is closed.

This unique microprocessor controlled Peltier cooler is a powerful designed dew point stabiliser. The dew point is set at 4°C but can be changed at any value between 1°C and 15°C. The gas cooler is equipped with a heat exchanger made of glass and PTFE. Heat exchanger made of full PTFE or stainless steel are also available.

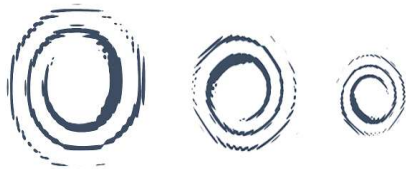
A preliminary fine filter (**AUF**) is installed at the inlet of the gas sampling pump and can be equipped with a variety range of filter elements in different materials and porosities.

Any condensation is continually removed by a peristaltic pump. (type **ACP ASR25**).



* picture may vary

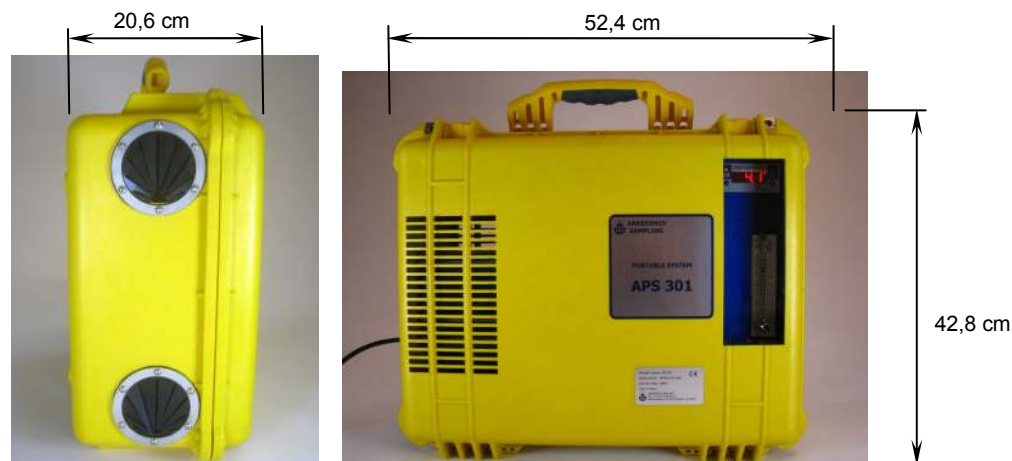
- **Low maintenance and self-monitoring**
- **Dew point +4°C ± 0,1°C**
- **Ready for use < 15 min**
- **Compact design**
- **Optimum reliability**
- **Light weight**
- **Universally equipped**
- **Good chemical resistance**
- **Very visible colour for use in process environment**
- **Values readable from outside**



Ankersmid Portable system

APS

Dimensions



Technical data

APS Portable system	APS 301	APS 302	APS 303	APS 311	APS 312	APS 313
Gas flow rate max.	350 NI/h	350 NI/h	350 NI/h	200 NI/h	200 NI/h	200 NI/h
Sample outlet dew point	+1°C +15°C, factory setting: +4°C					
Dew point stability	±0,1°C					
Sample inlet temperature	Max.190°C					
Sample inlet connection	Stainless steel connection DN4/6mm, suitable for heated sample lines					
Sample inlet dew point	Max. 80°C					
Ambient temperature	+5°C up to +45°C					
Maximum pressure	3 bar abs.					
Material of gas wetted parts*						
Heat exchanger head	PTFE	PVDF	SS316	PTFE	PVDF	SS316
Heat exchanger body	Glass	PVDF	SS316	Glass	PVDF	SS316
Diaphragm pump	AMP 11P: Head: PPS, Valves: FFPM, Membrane: PTFE-coated					
Filter	head, element holder: PVDF, filter element: PTFE, body: Duran® glass					
Peristaltic pump	Tube: Novoprene®, Connectors: PVDF					
Others	Tubing: PTFE, Inlet connector: SS316, Outlet connector: PVDF					
Number of gas inlets	1					
Number of gas outlets	1 (standard), max. 2					
Filter porosity*	2µm					
Alarm contact	Free programmable contact 1NO / 1NC, rating: 250V, 16A AC					
Total cooling capacity	Max. 225kJ/h			Max. 215 kJ/h		
Storage temperature	-25 °C up to +65 °C					
Ready for operation	< 15 min					
Power supply	230V/50Hz or 115V/60Hz					
Power consumption	100VA					
Electrical connection	Cold appliance plug with 1,5 m of cable					
Housing	Portable heavy duty ABS case					
Housing dimensions	52,4cm x 42,8cm x 20,6cm (W x H x D)					
Electrical protection	Fuse 2A					
Electrical equipment standard	EN61010					
Weight approx.	12 kg					

Maximum values in technical data's must be rated in consideration of total cooling capacity at 25°C ambient temperature and 5°C outlet dew point

PTFE = Polytetrafluoroethylene (Teflon®)

PVDF = Polyvinylidenfluoride

FFPM = Perfluorelastomer (Kalrez®)

PPS = Polypropylenesulphide (Ryton®)

* Other versions on request