



## ANKERSMID Control Module ACM 1xx Series

### Application

The ACM Control module for 19"-rack mounting is a modular system used as compact all-in-one device to monitor and control all gas sampling and gas conditioning equipment such as sample probe, cooler, sample line, pump and flow of gas media.

### Description

The Ankersmid ACM Module has a Siemens Touch-screen PLC S7, panel filter type APF, moisture sensor ALA 002, calibration valves (zero/span) for calibration via cooler or probe, back-purge output, ultrasonic flow sensor and a gas pump integrated. Depending on the ACM version the gas pump can be flow-adjusted or static. A remote control for calibration and back-purge as well as MODBUS and USB-output and output alarm relays are implemented.

The gas flow is measured and monitored by an integrated ultrasonic flow sensor. High/low flow alarm levels can be set customized.

The versions ACM 110 and ACM 120 are including a flow-controlled gas pump. In combination with the integrated ultrasonic flow sensor the system is able to compensate a flow loss which may occur due to clogging filters or variable process flow conditions.

The PLC S7 is able to monitor and control a heated gas sample probe and furthermore to operate various back-purge procedures.

The integrated optical moisture sensor can detect any kind of liquid, conductive and non-conductive. The gas pump will be switched-off automatically in case of liquid inrush.

For all connected devices detailed spare part lists can be shown directly on the PLC display.



Picture: ACM 1xx

- **19"-rack mounting**
- **Various back-purge/calibration possibilities**
- **Touch-screen PLC Siemens S7**
- **Ultrasonic flow sensor**
- **Optical moisture sensor**
- **Panel fine-filter**
- **Flow-controlled gas pump**
- **Needle valve**
- **Compact design suited for most stationary applications**
- **Easy handling**
- **Easy pump maintenance by pull-out system**
- **Low maintenance and self-monitoring**
- **Optimum reliability**

## ANKERSMID Control Module

### ACM 1xx Series

## Technical data

ACM Control Module	ACM 110	ACM 120	ACM 130
Gas flow rate max.	0-8NI/min	0-6NI/min	4,6NI/min
Calibration valves	Zero, Span		
Gas connections	1/4" f NPT		
Ambient temperature	+5°C up to +45°C		
Maximum pressure	3 bar abs.		
Materials	PTFE, PVDF, Duran® glass, EPDM, stainless steel		
Number of gas inlets	1		
Number of gas outlets	1 (standard), max. 2		
Filter porosity	0,1µm		
Alarm contact	2pcs. free programmable output alarm relays		
Signal output	MODBUS, USB 2.0		
Storage temperature	-25°C up to +65°C		
Power supply	110-265VAC		
Electrical connection	Cold appliance plug with 1,5m of cable		
Housing	Steel housing for 19"-rack mounting		
Electrical equipment standard	EN61010		
Weight approx.	Approx. 8kg		

## Flow diagram

