

MADE IN GERMANY

PREREX Gas pre-treatment system

- Complete solution for a great number of applications
- Long term reliable reproduceable measuring results
- Optimum operational safety due to self-monitoring
- Extremely precise long term stable dew point
- Fast response time due to low dead volume
- Very low dissolution rates
- Continuous condensate removal
- Low maintenance operation
- Easy to maintain design



The PREREX gas pre-treatment system of smartGAS is a high-performance solution for various sectors of industrial gas measurement technology. The fields of application range are from process measurement technology and emissions to fruit ripening. It convinces with its long term reliable reproduceable measuring results as well as its extremely precise long term stable dew point even under varying loads and optimum operational safety due to self-monitoring.

The PREREX is designed as a complete solution for a great number of applications and is suitable for installation in a 19" rack.

Application examples

Emission monitoring CEMS
Biogas
Process control
Fruit ripening
High voltage

Customizing options

High performance corrosion resistant sample gas pump
Easy to maintain robust fine dust filter
Corrosion resistant flowmeter with precise needle valve
Reliable condensate monitoring
Acid dosing pump

General features

Description:	Sample gas conditioning system
Cooling principle:	compressor cooling with hot gas bypass
Number of gas paths:	1 to 4

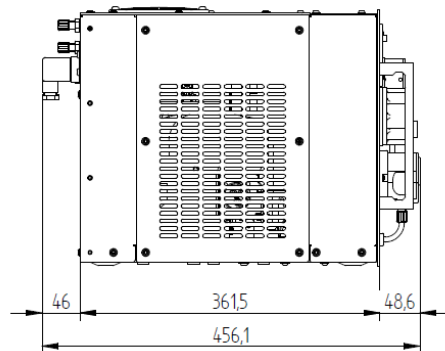
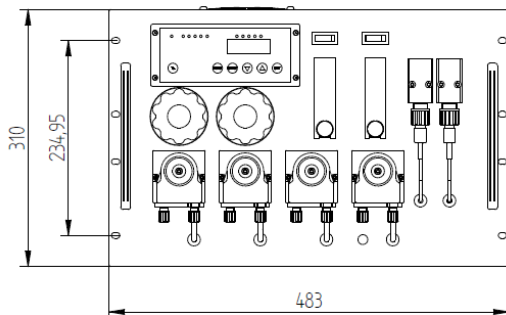
Basic information

Dimensions over all (B x H x T):	483 x 310 x 408 mm
Installation:	19" rack mounting
Mounting position:	horizontal
Approvals / signs:	CE
Weight:	25 to 31 kg (dependant on configuration)
Material heat exchanger:	PVDF
Dead volume per gas path:	52 ml
Connection sample gas / condensate outlet:	PVDF hose fitting DN 4/6 mm
Power supply:	220 to 240 VAC 50/60 Hz or 100 to 115 VAC 50/60 Hz
Power consumption (depending on load, ambient temperature and configuration):	200 to 345 VA
Connection power / status signal /sample gas pump:	external on installation site, fuse characteristic C: 230 VAC 6 A; 115 VAC 10 A
Protection class:	IP 20 (EN 60529)
On time:	100 %
Alarm set points:	< 0 / > +10°C
Status relay:	volt free changeover contact
Gas sample pump relay:	volt free contact NC
Switching capacity relays:	max. 250 VAC / 8 A (1,5 A at 250 VDC); min. 5 VADC 5 mA
Data interface (option):	DB 9 female
Interface protocol (option):	RS485 / ST Bus
Bus cable length max.:	1000 m

Operation

Flow rate*:	max. 120 NI/hr
Gas temperature inlet*:	max. +140°C
Dew point inlet*:	max. +80°C
Dew point outlet:	+3°C
Dew point stability (for constant inlet conditions):	±0,1K
Ambient temperature:	+5° to +45°C
Operating pressure:	0.2 to 2.2 bar
Ready for operation:	< 10 min
Pressure drop at max. flow rate:	2 mbar

Drawing



* Results from the effective cooling capacity at 25°C ambient temperature and 3°C outlet dew point and can be influenced by further operational parameters

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For more information, please visit www.smartgas.eu or contact us at sales@smartgas.eu

Please consult smartGAS sales for parts specified with other temperature and measurement ranges. At first initiation and depending on application and ambient conditions recalibration is recommended. Recurring cycles of recalibration are recommended.