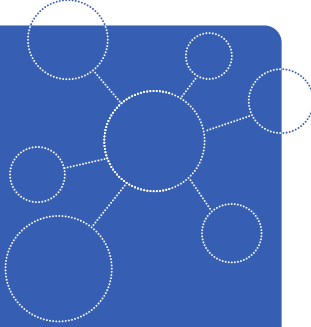




# smartGAS.

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

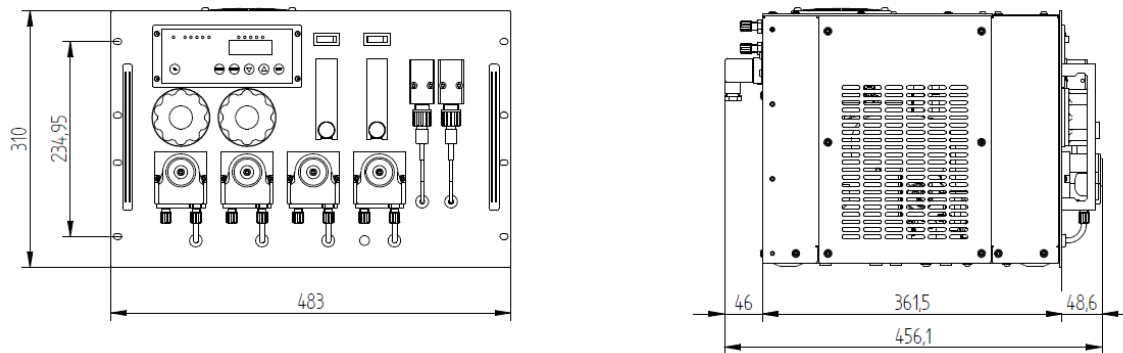
## Basic information

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

All rights reserved. Any logos and/or product names are trademarks of smartGAS. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of smartGAS is strictly prohibited. All specifications – technical included – are subject to change without notice. Depending on the application, the target gas and the measurement range the technical data may differ. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale.

For more information, please visit [www.smartgas.eu](http://www.smartgas.eu) or contact us at [sales@smartgas.eu](mailto: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.