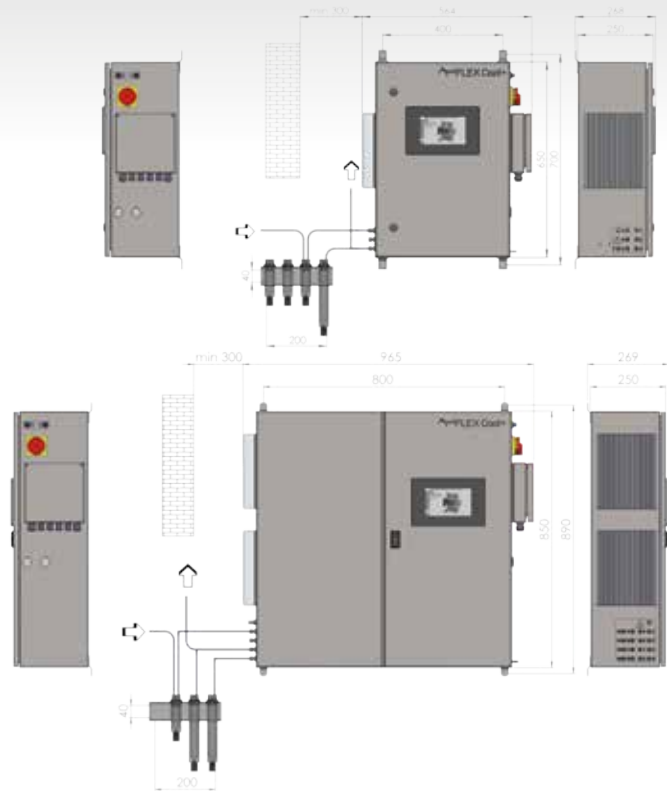




TECHNICAL DATA  
AWIFLEX COOL+  
AWIFLEX COOL+ XL



## AWITE GAS ANALYSIS SYSTEMS

GENERAL DATA	AWIFLEX COOL+	AWIFLEX COOL+ XL
Installation dimensions (WxHxD in mm)	564x700x268	965x890x269
Weight	≤ 34 kg	≤ 72 kg
OPERATION CONDITIONS		
Ambient temperature	5 – 35 °C	
Ambient humidity	0 – 80 % relative humidity	
Installation height	≤ 2000 m above NHN	
Protection type	IP 54	
Lengths of suction pipe	≤ 100 m	
Max. gas inlet pressure	20 mbar rel. (optional 400 mbar)	
Rel. gas humidity	≤ 100 %	
POWER SUPPLY		
Rated input voltage	100 – 240 VAC	
Input voltage range	85 – 265 VAC (Derating < 90 VAC: 2,5 %/Kelvin)	
Frequency range	50 – 60 Hz	
Power consumption*	≤ 80 W	≤ 160 W
Power supply unit	24 VDC / 5 A	24 VDC / 10 A
AwiProtect	Over and low voltage protection, overcurrent protection	
Line filter		

\* values might differ, see type plate of analysis system

## SENSOR SYSTEM

SENSOR <sup>1</sup>	MEASURING PRINCIPLE		MEASURING RANGE	REPEATABILITY <sup>2</sup>
Methane	infrared 2-beam sensor	thermostated, pressure compensation	0 – 100 Vol.-%	± 0,2 %
Carbon dioxide	infrared 2-beam sensor	thermostated, pressure compensation	0 – 100 Vol.-%	± 0,2 %
Carbon monoxide	infrared 2-beam sensor	thermostated, pressure compensation	0 – 100 Vol.-%	± 0,2 %
Oxygen	electrochemical	pressure compensation	0 – 25 Vol.-%	± 0,1 %
Hydrogen sulfide	electrochemical	pressure compensation	0 – 20 ppm	± 2,5 %
			0 – 200 ppm	± 1,0 %
			0 – 1.500 ppm	± 1,0 %
			0 – 3.000 ppm	± 1,0 %
			0 – 5.000 ppm	± 1,0 %
			0 – 10.000 ppm	± 1,0 %
			0 – 20.000 ppm <sup>3</sup>	± 1,0 %
Hydrogen	electrochemical	pressure compensation	0 – 50.000 ppm <sup>3</sup>	± 1,0 %
			0 – 2.000 ppm	± 1,0 %
			0 – 5.000 ppm	± 1,0 %
			0 – 10.000 ppm	± 1,0 %
			0 – 20.000 ppm	± 1,0 %
			0 – 50.000 ppm	± 1,0 %
Hydrogen	thermal conductivity	temp.- and pressure compensation	0 – 100 Vol.-% <sup>3</sup>	± 1,0 %
			0 – 100 Vol.-%	± 0,2 %

<sup>1</sup> configurable and extendable as required <sup>2</sup> from upper measuring range value <sup>3</sup> with dilution and only in conjunction with auto-calibration

## PROCESS CONNECTION

Hose screw connection, stainl. steel 4/6 mm standard

Pipe screw connection, stainl. steel 6 mm VA-pipe optional

Hose screw connection, stainl. steel 1/8" / 1/4" optional

Pipe screw connection, stainl. steel 1/4" VA-pipe optional

## NUMBER OF MEASURING POINTS

**AwiFLEX Cool+** 1-4

**AwiFLEX Cool+ XL** 1-9

External measuring point switch-over AwiSamplex for additional measuring points

Connection for discharge of exhaust air into the open or re-feeding of measuring gas into process pipe (relative pressure < 20 mbar)

Connection for removal of condensate in provided condensate container

## MAXIMUM NUMBER OF DAILY MEASUREMENTS

**AwiFLEX Cool+** 50, continuous

**AwiFLEX Cool+ XL** 50, continuous

## SAFETY MECHANISM

Water sensor

Pressure sensor

Internal monitoring of leakages (CH<sub>4</sub>) by concentration measurement (interior)\*

Automatic detection of overloads and temporary switch-off of involved measuring channels to preserve the sensors

Temperature monitoring (interior)

Gas warning sensor for interior of the device

**AwiFLEX Cool+ XL** optional

## GAS PROCESSING

Gas filter

Gas precision pressure regulator optional

Condensate trap

Gas cooler AwiCool

Other pressure control systems optional

## PLC

AwiCore electronic module extendable

## GAS TRANSMISSION

Encapsulated analytic valves

Durable membrane pump

## DISPLAY AND OPERATION

Panel-PC 7" TFT touch panel 800x480

\* range and kind of monitoring variable according to risk evaluation of the devices

## SOFTWARE FEATURES

Display of measurement history graphic/tabular

Extensive data storage 4GB microSD card

## DATA INTERFACES

Group fault potential-free 1 x relay (Uout: max. 250V AC/DC @ 6A)

Alarm outputs (optional) potential-free n x relay (Uout: max. 250V AC/DC @ 6A)

Analogue outputs 4 – 20 mA (optional) analog output feed-through terminal

Ethernet (optional) Ethernet/IP – I/O adapter (slave) 1 x RJ45 connector  
PROFINET – I/O device (slave)  
Modbus TCP slave  
ProcessView  
AwiView  
TCP Socket  
VNC

RS232 / RS485 (optional) Modbus RTU slave 1 x M12 connector

Profibus DP slave (optional) 2 x M12 connector

USB (optional) 1 x type A

More interfaces and transfer protocols on request

## CERTIFICATION

NRTL TÜV SÜD Mark (UL / CSA 61010-1)

Certificate No. U8131083160001

## OPTIONS

Combi package **AwiDESULF** for microbiological desulfurization incl. compressor, control valves and controller output

FuzzyLogic control for controlling valves, fans etc.

Integration of external sensors (analogue and digital), e.g. temperature, pressure, gas amount measurement, relative humidity

Calculation of calorific value, energy flow, CH<sub>4</sub>- and humidity compensation etc.

Automatic calibration feature

Remote access to gas analysis

Monitoring of measuring gas pump with switch mechanism to redundant pump

Automatically known values for measuring ranges to increase accuracy

Control of gas analysis from high-level controls



Technical changes reserved (series 10 - version 05.00)



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