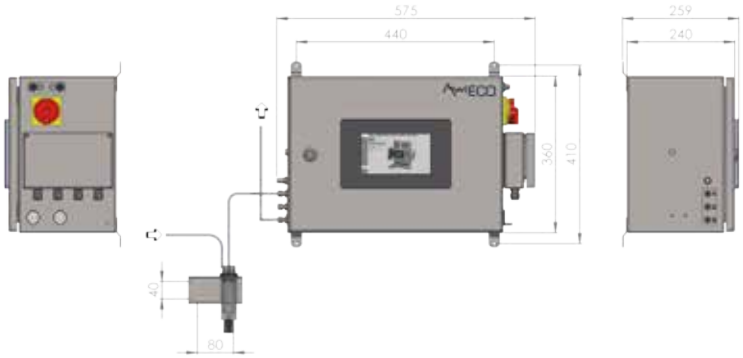
Awite

Avensys

TECHNICAL DATA
AWIECO



AWITE GAS ANALYSIS SYSTEM

GENERAL DATA	AWIECO
Installation dimensions (WxHxD in mm)	575x410x259
Weight	≤ 18 kg
OPERATION CONDITIONS	
Ambient temperature	5 – 35 °C
Ambient humidity	0 – 80 % relative humidity
Installation height	≤ 2000 m above NHN
Protection type	IP 54
Length of suction pipe	≤ 100 m
Max. gas inlet pressure	20 mbar rel. (optional 400 mbar)
Relative 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*	≤ 30 W
Power supply unit	24 VDC / 5 A
AwiProtect	over and low voltage protection, overcurrent protection
Line filter	

* values might differ, see type plate of analysis system

SENSOR SYSTEM

SENSOR[1]	MEASURING PRINCIPLE		MEASURING RANGE	REPEATABILITY[2]
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 %

[1] Configurable as required [2] from upper measuring range value

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

AwiECO	1
AwiECO special version with 2 H_2S-Sensoren	2
Connection for discharge of exhaust air	

MAX. NUMBER OF DAILY MEASUREMENTS

AwiECO	50

SAFETY MECHANISM

Water sensor
Pressure sensor
Internal monitoring of leakages (CH_4) by concentration measurement (interior)*
Automatic detection of overloads and temporary switch-off of involved measuring channels to preserve the sensors

GAS PROCESSING

Gas filter	
Gas precision pressure regulator	optional
Condensate trap	
Other pressure control systems	optional

PLC

AwiCore electronic module	not 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

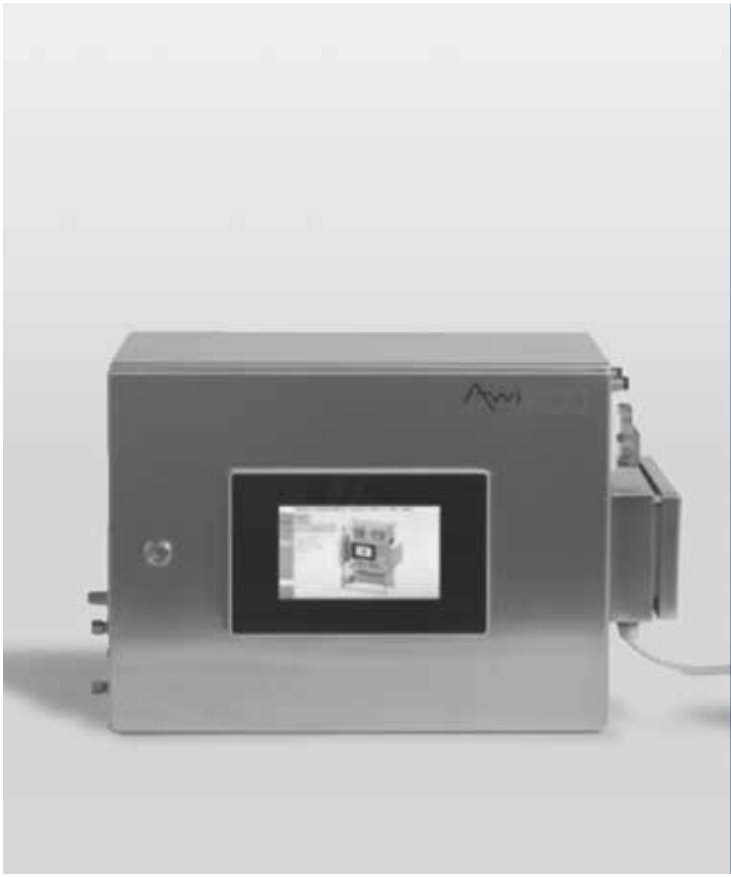
Analogue outputs 4 – 20 mA	analog output	feed through terminal
Ethernet (optional)	Ethernet/IP – I/O adapter (slave) PROFINET – I/O device (slave) Modbus TCP slave ProcessView AwiView TCP Socket VNC	1 x RJ45 connector
RS232 / RS485 (optional)	Modbus RTU slave	1 x M12 connector
Profibus DP slave (optional)		2 x M12 connector
USB (optional)		1 x Type A

CERTIFICATION

NRTL TÜV SÜD Mark (UL / CSA 61010-1)
Certificate-No. U8131083160001

OPTIONS

Flow measurement with CH_4-measurement and compensation
Remote access to gas analysis



Technical changes reserved (series 10 - version 04.00)