



TECHNICAL DATA AWILAB DIGESTER



Subject to technical modifications (10.4)

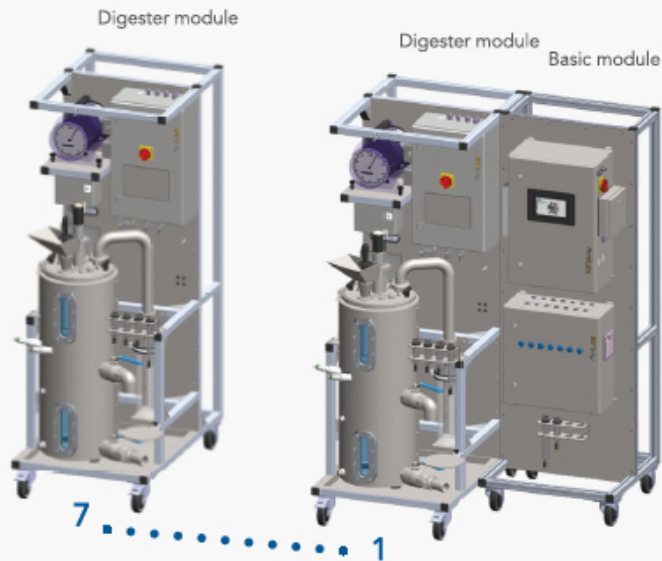
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AWITE LAB FACILITIES

AWILAB DIGESTER „STAND ALONE“



AWILAB DIGESTER „MODULAR“



GENERAL INFORMATION

Dimensions (WxHxD in mm)

AWILAB DIGESTER „STAND ALONE“

700x1955x1172

AWILAB DIGESTER „MODULAR“

basic module: 700x1955x640 +
digester module: each 700x1955x1040
≤ 100 kg (basic module) + ≤ 250 kg
(each digester module, max. 7 pcs.)

Weight

≤ 250 kg

OPERATING CONDITIONS

Ambient temperature

5 – 35 °C

Ambient humidity

0–80% relative air humidity

Installation height

≤ 2000 m above standard normal zero (sea level)

Protection type

IP 43/40

basic module: IP 43
digester module: IP 43/40

POWER SUPPLY

Rated input voltage

230 VAC

Frequency range

50 – 60 Hz

Nominal output

≤ 300 W

basic module: 160 W
digester module: 300 W

VISUALIZATION AND OPERATION / AUTOMATION

Panel-PC	7" TFT touch panel 800x480
Remote access	LAN connection, AwiRemote
Data recording and SQL database	

SAFETY DEVICES

Overpressure protection	20 mbar
Leak test of the entire system	
Power consumption stirrer	

AMBIENT SENSORS

temperature	0°C - 100°C
air pressure	500-1,150 mbar abs.

EQUIPMENT "STAND ALONE"

Fermentation tank

Material	stainless steel
sight glasses (2)	filling level / ground level
Fermenter size	20-50l
Heated and fully insulated	
Sampling connection in the middle	2"
Extraction connection below	2"
Manual substrate feed via filler neck	
Various spare connections in the container and lid	

Stirrer

Material	stainless steel
Screw-paddle combination	
Motor Un: 24 VDC In: 3,8 A Nn: 64,2 rpm Mn: 8 Nm	
Interval or continuous operation	
Speed-controlled	

Gas meter

Drum gas meter	1-60 l/h
Max. overpressure	50 mbar
Pulse generator	

Control cabinet

Material	stainless steel
Temperature measurement fermenter	
Pressure measurement fermenter	
Drive control stirrer	
Measurement power consumption stirrer	
Timed emptying of the gas bags	

Electric heating

Control temperature	≤ 55°C
Self-limiting heating tape	max. 85°C
Adjustable temperature gradient	

Gas analysis system

Typ	AwiFLEX Cool+
Discontinuous measurement	
Gases	CH ₄ , CO ₂ , O ₂ , H ₂ , H ₂ S
Output of error messages	

Gas storage bag

Gas collection/analysis	5l
Pressure equalization fermenter	2l
Pressure equalization after measurement	15l
Automatic emptying of the gas collection bag after measurement	

N₂ rinsing for inerting

Data interfaces

Ethernet (AwiRemote)

SUPPLY PROVIDED BY CUSTOMER

1x power supply 230VAC | 50/60Hz | 1 phase + N + PE (fuse 16A, overvoltage and lightning protection)

1x LAN connection cable (for remote access, data readout, ...)

Exhaust air system

EQUIPMENT "MODULAR" (IN ADDITION TO "STAND ALONE")

Consisting of basic module and up to 7 digester modules

AwiLAB Gasanalysis

Integration and gas measurement of up to 7 fermenters
LED status display
Connection volume measurement

ON REQUEST

pH probe, redox probe, further sensors

Milligas counter (MGC), drum gas meter (TGZ) with higher flow

Fermenter and container sizes

Container variants

Modbus TCP/IP

Other versions



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