

DATA SHEET

RNS MHU – 01

15 February 2021

LAB SCALE 1m² AGMG / PGMD

Intended use	membrane distillation, airgap or permeate gap
	Multi-channel flat sheet
Effective membrane surface	1 m ²
Flux	Approximately 3 – 8 kg / m ² . hr
Conductivity	Pure distillate 1 – 5µS/cm
Flow	400 – 1500 ltr/hr
Flow direction	Counter current
Characteristics	
Membrane	0.2µm ePTFE Membrane, Thickness 69 µm
Spacer membrane channel	2,5 mm Polypropylene
Spacer distillate channel	0,75mm Polypropylene
Spacer contactor	2,5 mm Polypropylene
Contactor	Tri-laminate PET – Aluminium – PET 62 µm
Housing Characteristics	
Housing material	stainless / steel
Potting material	Epoxy
Connectors	Polypropylene Ø 25mm
Dry weight	25 kilo
Max. working	< 1,0 Bar @ 70°C
Max. working temperature	70°C
Dimensions	320 x 130 x 680mm (LxWxH)
Storage transport temperature	5 – 70°C
Pressure frame	Panel formwork or skid is always needed



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Excellent separation quality

- Pure distillate 1 - 5 μ S/cm
- Flux 3 – 8 kg / m² . hr
- 100% rejection of non-volatile components possible

Very high corrosion resistant

- Use of advanced materials and polymers

Superior cost efficiency

- Simplicity of the system
- Low pressure technology
- Less fouling
- Less chemicals for cleaning
- € 0,60- € 1,0 per m³ (mass production of the units)

High energy efficiency

- Low electrical energy consumption 0,6 – 1,5 kWh/m³
- Thermal energy consumption 65- 150 kWh/m³ (reuse of waste heat or alternative energy sources)

Very good scalability

- Modular set-up
- Small footprint of the compact unit

Particularly suitable for water with high saline content

- Seawater
- Concentrated seawater
- Treating > 250 grams per liter , up till crystallisation

High yield and reliable operation

- Simplicity of the distillation process and system