# Freshwater units RATIOfresh / tubra®-nemux S



E N E R G I E T E C H N I K ENERGY TECHNOLOGY TECHNOLOGIE ÉNERGÉTIQUE E N E R G I E T E C H N I E K





tubra®-nemux S

RATIOfresh 500 / 810

The RATIOfresh and tubra<sup>®</sup>-nemux S freshwater units prepares hot water only when needed. This is solar hot water generation of the future - hygienic and demand based.

STANDOUTS	DETAILS
• Hygienic domestic water	The RATIOfresh and tubra <sup>®</sup> -nemux S freshwater units provides domestic hot water by means of flow-through heating, exactly when needed. Storing of domestic hot water is not required anymore.
<ul> <li>High water heating comfort</li> </ul>	Intelligent pump logic and a generously sized heat exchanger guarantee high hot water comfort with great energy efficiency.
<ul> <li>Extremely light and compact</li> </ul>	The fresh water station tubra®-nemux S is extremely compact, completely pre-assembled and prepared for quick connection to the storage and domestic water circuit.
<ul> <li>Versatility included</li> </ul>	RATIOfresh 500 and 810 is equipped with extensive circulation, disinfection and cascading functions.



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## tubra®-nemux S

For hygienic domestic water heating by flowthrough process in single family homes.

Integrated tubra® fresh water controller with extensive range of functions: Three circulation programmes, cascade function, return flow layering, dynamic reduction of the set temperature, comfort function (warm start by pre-heating the plate heat exchanger), hygiene programme and thermal disinfection

Powerful soldered stainless steel heat exchanger. For maximized solar yield through low return flow temperatures in the buffer storage circuit





Easy commissioning and installation, either on the wall or directly on the storage (with optional storage connection set) Prepared for re-circulation operation

Demand driven high efficiency power saving circulation pump

Completely thermally insulated, particularly compact and lightweight construction, weighs only 9 kg



#### ISFH TESTED

The german Institute for Solar Energy Research (ISFH) has tested the fresh water station tubra® nemux S and attests a very high control quality and efficiency: Best measured station in comparison with other stations of the same capacity.



## RATIOfresh 500 and 810

For hygienic domestic water heating by flow-through process in apartment houses as well as hotels, sports facilities and industrial settings.

> Easy and quick installation with flat sealing screw connections and standard power plug (230 V)

Controller with extensive re-circulation, disinfection and return-flow functions. Cascading of up to 4 stations.

Generously sized stainless steel plate heat exchanger, high-quality EPP-insulation

#### FRESH LINE - SOLAR PACKAGES WITH FUTURE

RATIOfresh 210, 500 and 810 also are included in the FRESH line solar packages. They offer the highest possible flexibility. Storage tanks, collector types and freshwater units can be freely combined. The packages hence are available for a variety of solar yields and almost any imaginable building situation.

More information at: www.wagner-solar.com



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### **Accessories**



tubra® ball valve set for storage and DHW connections, 3 pcs.



rculation set with circulation



tubra® cascade set for hydraulic connection of two tubra®-nemux S stations

Re-circulation set with circulation pump Wilo Yonos Para Z 15/7.0 RKC, ball valves, gravity brake and immersion sleeve incl. temperature sensor Pt1000





Cascade set for RATIOfresh 500 / 810

Freshwater units	tubra®-nemux S	tubra®-nemux S VI	E RATIO	Ofresh 5	00	RAT	lOfre	esh 8	10
Version	Stainless steel heat exchanger	Full stainless steel heat exchanger	t						
Nominal capacity									
10 °C $\rightarrow$ 45 °C (secondary, l/min) 60 °C (primary)		20,5	50			77			
10 °C → 60 °C (secondary, l/min) 45 °C (at tap) 70 °C (primary)		27,0	53			82			
Coefficient of performance $N_{\scriptscriptstyle L}$		3	2	cascade 2 x 3 x			-	ascad 3 x	-
10 °C $\rightarrow$ 45 °C (sec.) 85 °C (prim.) 10 °C $\rightarrow$ 60 °C (sec.) 75 °C (prim.)				36 155 51 112	230 169	58 39	160 114	280 200	
Installation type		wa	ll mounting						
Dimensions (LxWxH, mm)	425 x 350 x 190 795 x 602 x 298								
Weight (kg)		9	27			42			