



Codes
T1000-DDE

Fegen Solar Modules SM series are All-in-One, Plug & Play, Outdoor, Scalable enclosures that incorporate all solar thermal and solar electric distribution gear for buildings in one device.

- No need of a conventional indoor boiler room
- No on-site labor cost
- Immediate start-up
- No responsibility conflicts
- Easy control and maintenance
- Scalable for infinite combinations

- **Tight double door dimensions**
- **1000 liters water storage**
- **Integrated heating element**
- **Simple twin DC pump design**
- **Solar back up system for redundancy**
- **Defrost system for reliability**
- **Solar pool gear option (P extension coded)**

CABIN GENERAL CHARACTERISTICS

	Thermal Part
Type	RITTAL TS 8
External dimensions W x H x D (front view)	1200 x 2000 x 800 mm / 47,24 x 78,74 x 31,50 inch
Mounting plate	Width: 1099 mm, Height: 1896 mm
Weight/pack	203 kg
Material	Sheet steel
Cold / Hot Supply - Brass	1 ¼ inch
Color	RAL 7035
Protection category IP to IEC 60 529	IP 55
Doors	2
Light	Auto door power On/Off - 600 lumens
Scalability	Unlimited
Protection	Over-temperature, Anti-freeze control
Approvals	Bureau Veritas, CSA, TÜV, DNV-GL, Lloyds Register of Shipping, Russian Maritime Register of Shipping, UL + C-UL
Certificates	EAC,IK-Code, Protection category
Declarations	Declaration of conformity, Manufacturer's declaration
Certification	SRCC, Solar Keymark, CE

CABIN LIGHTING SYSTEM-TECHNICAL SPECIFICATIONS

	General Data
Type	RITTAL LED system light
Material	Light body: Extruded aluminium Light cover: Polycarbonate (halogen-free) Light ends: PC-ABS (halogen-free)
Color	Enclosure: RAL 7016
Protection category IP to IEC 60 529	IP 20
Dimensions	Width: 337 mm, Height: 55 mm, Depth: 23 mm
Rated operating voltage	100 V - 240 V, 1~, 50 Hz/60 Hz
Operating temperature	Operation (environment): -20°C...+55°C
Power consumption	7 W
Luminous flux	600 lm
Light colour	4000 K (neutral white)
Protection category	II (all-insulated)
Weight/pack	0.35 kg
Approvals	CCC, ENEC
Certificates	EAC

SOLAR TANK CHARACTERISTICS

General Data	
Type	TESY EV
Solar tank capacity	500 lt / 132 gal
External dimensions W x H x D	750 x 1674 mm / 29,5 x 66 inch
Weight	145 kg / 320 lb
Number of boilers	2
Max pressure primary circuit	8 bar
Max pressure secondary circuit	6 bar
Electric Resistance	1.50 – 4.00 KW (UL Ready) - not included
Anti-corrosion protection	2 x magnesium anodes
Certification	Solar Keymark, CE

DC CIRCULATION PUMP

General Data	
Type	DC Solar Pump
Power	10 W (6-24 Vdc)
Max Capacities	22 Lpm / 6 Gpm
Max heads	3,2 m / 10,5 ft
Suitable fluids	Water / Glycol
Maximum working temperature	110 °C / 230 °F
Max. working pressure	10 bar
Number of DC Pumps	2
Protection	Over-temperature, overload, Over voltage, dry running protection

Temperature Sensors

Platinum RTD type	1,000 ohm
Collector sensor working range	-58 - 355 °F (-50 - 180 °C)
Tank sensor working range	15 - 175 °F (-10 - 80 °C)
Length of collector black cable	60 in (1.5 m)
Length of tank sensor gray cable	95 in (2.5 m)

Glycol (recommended type)

Type	DOWFROST HD
Recommended temperature range	-46°C..163°C
Freezing Point	-33.5 °C
Boiling Point @ 1 bar	105.6 °C
Freeze protection temperature	-51 °C
Burst protection temperature	-73 °C
Weight % Propylene Glycol	94
Weight % performance additives	6
Specific gravity (15 °C)	1.053 - 1.062
pH of Solution	9.5 - 10.5
Reserve alkalinity	15.0 ml