



Codes

T40-DSU

T50-DSU

T80-DSU

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 single door dimensions**
- **40-80 gallons water storage**
- **Integrated heating element**
- **Simple 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)	800 x 2000 x 800 mm / 31,50 x 78,74 x 31,50 inch
Mounting plate	Width: 699 mm, Height: 1896 mm
Weight/pack	137 kg
Material	Sheet steel
Cold / Hot Supply - Brass	1 ¼ inch
Color	RAL 7035
Protection category IP to IEC 60 529	IP 55
Doors	1
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		T40	T50	T60
General Data				
Type			Sammler SV	
Solar tank capacity	160 lt / 40 gal		200 lt / 50 gal	300 lt / 80 gal
External dimensions W x H	580 x 1058 mm 22,83 x 41,6 inch		580 x 1292 mm 22,83 x 50,9 inch	580 x 1735 mm 22,83 x 68,3 inch
Weight	67 kg / 235 lb		82 kg / 235 lb	107 kg / 235 lb
Number of boilers			1	
Max pressure primary circuit			3 bar	
Max pressure secondary circuit			3 bar	
Electric Resistance			1.50 – 4.00 KW (UL Ready) - not included	
Anti-corrosion protection			2 x magnesium anodes	
Certification			SRCC, Solar Keymark, CE	
DC CIRCULATION PUMP				
General Data				
Type			DC Solar Pump	
Power			10W (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			1	
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	