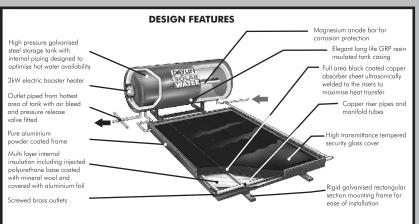




## Ultrasun UFD

Flatplate Solar Water Heaters





Ultrasun UFD Flatplate solar hot water systems are established and effective heaters that provide excellent performance, good value and guaranteed long life. They are of Open/Closed Loop Thermosyphon type with the water flow circulating through the collectors and being stored in the tank ready for use. Features include:-

- Heavy duty tank that features an insulation jacket and totally weather proof GRP casing, a heavy duty stainless steel cylinder internally piped to optimize hot water availability and magnesium sacrificial anode for cathodic corrosion protection.
- Solar collectors that incorporate full area copper absorption plates ultrasonically welded to copper circulation tubes, high specification insulation and tempered security glass to provide energy absorption of up to 95%.
- Low thermal conductivity high specification plastic collector tank connection piping with silver foil coated polystyrene insulation jackets.
- Connection piping that includes an incoming non-return valve, a diverter valve controlling max water temperature to 60°C, pressure release valve and drain cock. All fittings are provided from the inlet to the outlet for simple installation.
- Knock down mounting frame making the units modular, easy to handle and install

Ultrasun UFD Flatplate solar water systems are available in various tank sizes and collector configurations to suit domestic and small scale institutional applications. They are effective and robust products designed for many years of trouble free operation with a 5 year guarantee to demonstrate the product quality. With the benefits of progressive design and high quality components they are the ideal solution for all solar water heating applications.

## **OPERATING CONDITIONS**

Water Quality: Water outside the following limits should be appropriately pre-treated:

**Direct:** Clarity: clear, **TDS**: <600mg/l, **Hardness**: <200mg/l CaCo<sub>3</sub>, **Saturation Index**: >0.8<1.0 **Indirect:** Clarity: clear, **TDS**: <1500mg/l, **Hardness**: <400mg/l CaCo<sub>3</sub>, **Saturation Index**: >0.8<1.0

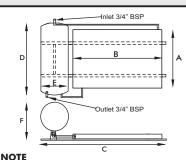
**Test Pressure**: Tank - 5Bar, Collector -14Bar

Max Operating Pressure - 3.5Bar

Max Flow Rate - 2m<sup>3</sup>/hr

## **SPECIFICATIONS**

Model		UFD150DS	UFD150DL	UFD200DS	UFD200DL	UFD300DS	UFD300DL
System Tank Size (Litres)		160		220		320	
Typical Household (People)		5		7		10	
Collector Model		1 X FCP1.7	1 X FCP2.4	1 X FCP2.4	2 X FCP1.7	1 X FCP3.0	2 X FCP2.4
Collector Area (m³)		1.7	2.4	2.4	3.4	3.0	4.8
Collector Weight (kg)		25	38	41	64	51	82
Collector Fluid Capacity (litres)		1.2	1.5	1.5	2.4	1.7	3.0
Max Heat Output/Day (kWhrs)		9	14	12	18	15	24
Min Heat Output/Day (kWhrs)		6	10	8	12	10	16
Dimensions (mm)	Α	800	800	800	1760	800	1760
	В	1920	1890	1890	1920	2440	1890
	С	2620	2590	2590	2620	3140	2590
	D	2780	2780	2780	2780	2780	2780
	E	600	600	600	600	600	600
	F	700	700	700	700	700	700
Empty Weight (kg)		93	110	135	156	180	214
Full Weight (kg)		253	270	355	376	490	534



- Standard output systems (S Models) should be used in hot locations and high output systems (L Models) in more temperate ones. However hot water availability will vary throughout the year depending on prevailing irradiation levels and electric boosters may be necessary on cooler days.
- Maximum heating output is based on average irradiation levels of 6000W/m²/day prevailing in September - Marchand minimum Heatingoutput is based on average irradiation levels of 4000W/m²/day prevailing in June/July and are for indicative purposes only.