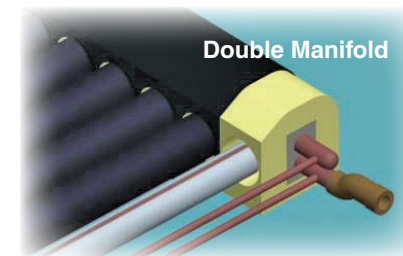


## U pipe Direct Flow Double Manifold System

Direct Flow is a very simple system that works in a similar fashion to a conventional flat plate collector but with the benefit of vacuum insulation.

The pUre U-Pipe collectors have the same copper tube as a traditional heat pipe collector, but it instead bends around on itself at the bottom of the glass tube and returns directly into the double manifold. This enables the water/glycol to travel through the tube for direct gain from solar radiation. As this water-glycol is heated, it is pumped around the collector tubes and eventually passes through the secondary coil in the hot water storage cylinder. The pUre Collectors require fewer tubes up on the roof than a heat pipe system to reach the same peak efficiency levels.

- pUre series has a staggering **758 kWh/m<sup>2</sup>\*** output
- Can be installed vertically, horizontally & on flat walls- allowing flexibility of system design and installation.
- U pipe collectors have a smaller footprint than Heat Pipe & Flat plate systems - Less visually intrusive
- No parabolic mirror - No efficiency decrease during service lifetime.
- Direct flow U pipe technology -More rapid heat transfer
- Suitable for mains pressure water
- Pre-assembled in 6 and 16 tube arrays - no roof assembly required
- Ideal for flat roof and Inclined up to 90°
- Black anodised aluminium casing and frame- sleek single colour design
- Operates up to 6 Bar - tested to 9 Bar
- Dry tubes - Quick & easy replacement in situ without draining system
- Tested to withstand 25mm hailstones @ 23m/s
- Outperform flat plates - Autumn , Winter & Spring
- Operates at temperatures of -40°C
- ¾" male copper manifold fitting – “plug and perform” design provides fast and simple installation.
- Individually serial numbered for commissioning and warranty
- Screw end caps for easy tube replacement
- MCS Approved & European Solar Keymarked
- Unrivalled 15 Year Warranty on Tubes – Peace of mind



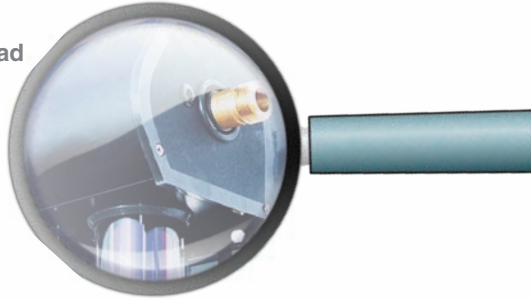
**pUre SOLAR ENERGY SYSTEM.....solar evolved.**



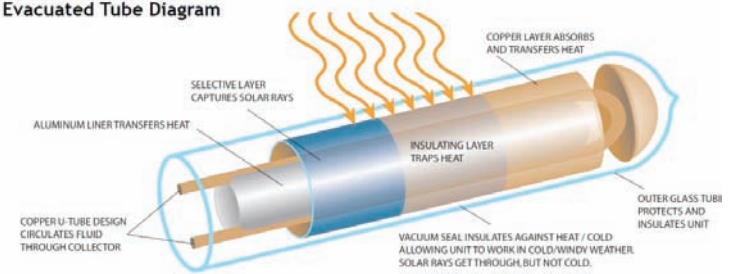
The pUre energy range is designed to give high performance from a small footprint.

A simple plug 'n' perform design complete with lugging handles make installations a breeze; the pUre series is the ultimate choice. No other system offers the performance, reliability, mounting choices, aesthetics and warranty for such great value.

Available in either 6 or 16 tube pre-assembled arrays suitable for any application including commercial & domestic heating & hot water, air-conditioning and water desalination.



**Evacuated Tube Diagram**



Number of evacuated tubes		6	16
Conversion factor	$\eta_0$	0.757	0.757
Heat transfer coefficient	$a_1$	1.552 W/(m²K)	1.552 W/(m²K)
	$a_2$	0.016 W/(m²K²)	0.016 W/(m²K²)
Yield forecast (aperture area 3m²)			
Reference location Würzburg, Germany*	kWh/m²a	758	758
Grid dimensions (L x W x H)	mm	1978 x 488 x 167	1978 x 1210 x 167
Gross surface area	m²	0.96	2.39
Aperture area	m²	0.56	1.5
Collector contents	litres	0.65	1.7
Weight	kg	21	56
Max. working overpressure	bar	6	6
Max. stagnation temperature	°C	242	242
Manifold Connection fitting		3/4" male thread	3/4" male thread
Sensor sleeve	mm	6	6
Collector material		copper, AL profile	copper, AL profile
Glass tube material		Borosilicate 3.3	Borosilicate 3.3
Selective absorber coating material		selective coating CU-AL/SS/N-ALN	selective coating CU-AL/SS/N-ALN
Glass tube (Ø ext./Ø int.)	mm	58/47	58/47
Wall thickness/tube length	mm	1.6/1800	1.6/1800
Colour (frame profile, anodised)		black anodised	black anodised
Colour (plastic parts)		black	black
Thermal shock test	ITW test no.	08COL700	08COL700
Hailstone test according to DIN EN 12975-2		passed optional impact resistance tests following EN12975-2	
DIN CERTCO - Register number		011-7S575 R	011-7S575 R
Guarantee on tubes		15 years against loss of vacuum	

