# More value from the Sun!











## The World Leader in Solar Thermal Concentration.

solar energy catcher

#### Efficiency

- The highest Solarkeymark rating in the world Certificated at 91%.
- Very original Biaxal Solar Tracker, 100% stable.
- Maintains all functions over the long term with minimal and simple maintenance. Very cost efficient.
- EOSTH produces the exact temperature you require up to 100 degrees.

## No Equal:

EOSTH has left Flat panels a long way behind. Concentrator efficiency, yield, and life span are far higher.

#### Savings

EOSTH simply saves you money all the way round!! Processes where this has proved to be the case. Domestic Hot Water - Heating - Air Conditioning - Drying - Steam Generation - Pasteurization -Industrial Washing - Desalination - Chemical Dehumanisation - Recovery and Enhancement of Thermal Waste

## Who Can Benefit:

Everyone and Anyone who uses Energy.

Farms - Greenhouses - Sports Centres - Local Communities - Hotels and the whole hospitality industry. The whole Agro-Food processing industry - Garden Centres - Laundries – Commodity Stores Any Factory that uses power e.g. Textiles – Paper Conversion – Chemicals – Vehicles





















# The Future is Green

More and more people think about the environment and the future of our planet - many governments recognise this and incentivise projects like ours with tax benefits and other national support.

EOSTH has been able to demonstrate the advantages of our philosophy and how it is possible to maximise on this potential.

For example a Standard EOSTH installed in Italy generated approx. 30/40,000 kilowatts per year and avoided about 6-8 tons of carbon dioxide and fine dust getting into the atmosphere. We are very proud of this result.







## For the Environment and our Children's Future

- Long term sustainable technological solutions.
- Minimum of 30 years life cycle of the product without any loss of performance.
- Dramatically reduces CO2 and fine dust emissions in the environment.
- Improves the quality of the working environment by reducing fumes and noise.
- Ability to recover the use of marginal areas around buildings.
- By making products and services more ecological the perceived value and the enjoyment of the final product and/or service increases substantially.

## Some Commercial advantages

- Reduce fuels costs substantially.
- Extend the life of your existing equipment particularly a boilers life cycle.
- Product life cycle minimum 30 years without loss of performance. Commercial as well as environmental advantages.
- Contain the maintenance costs of the system in general
- Makes production process's much more sustainable.
- Improve your Companies standing in the market and it's corporate image.
- Benefit from important non-repayable government and local authority contributions and/or tax benefits.

e.g. In Italy the Thermal Account 2.0 and other.

EOSTH is an Italian invention. Designed and manufactured In Italy by people who understand and care.









#### Scheda tecnica EOS TH / EOS TH datasheet

			Valore / Value	Valore / Value		
Descrizione / Description		Unità / Unit	EOS TH 10 specchi	EOS TH 14 specchi		
	Fattore di concentrazione (geometrico) / Concentration ratio (geometrical)	-	144			
	Area singolo collettore AG/Aa / Single collector Area AG/Aa	m²	3,86 / 3,72			
	Numero di specchi EOS TH / EOS TH Number of mirrors	nr.	10	14		
	Superficie lorda totale degli specchi / Total gross area of the mirrors	m²	3,863x5 = 19,315	3,863x7 = 27,041		
	Tecnologia inseguimento / Tracking technology	2 assi / biaxial	-			
Dati generali General data	Angolo azimuth / Azimuth range	gradi / degrees	0 / 270°			
	Angolo elevazione / Elevation range	gradi / degrees	-15 / +90°			
	Controllo inseguimento / Tracking control	Co	ntrollo Posizione Astronomica Solar Position algorithm			
	Precisione puntamento / Pointing accuracy		<0,05°			
	Temperatura operativa ambiente / Operating ambient temperature	°C	- 20 > + 55			
	Moduli termici / Thermal modules	Nr.	5	7		
	Potenza di picco termica a 0° / 0° Thermal peak power	kWth	3,51x5 = 17,55	3,51x7 = 24,57		
	Fluido / Fluid	Solu	Soluzione glicolica / Glycol solution			
Dati termici Thermal data	Temperatura massima fluido / Maximum temperature fluid	°C	100°			
	Temperatura di stagnazione / Stagnation temperature	°C	160°			
	Pressione massima operativa / Maximum operating pressure	kPa	200			
Dimensioni Physical dimensions	Velocità vento operativa (max) / Operating wind speed (max)	km/h	40			
	Velocità vento sicurezza (max) / Permissible wind speed (max)	km/h	130			
	Peso (escluse fondazioni e accessori) / Weight (foundation and accessories excluded)	kg	1.700 / 1,700	2.100 / 2,100		
	Altezza Operativa / Height in operation	m	4,2			
	Profondità / Depth	m	3,0			
	Larghezza / Width	m	6,2	7,5		
Efficienza	Termica 0° / 0° Thermal	90,9% DNI				
	Energia Qsol (50°C) singolo collettore / Single collector energy Qsol (50°C) Atene/Athens	kWht/anno	4776			
Efficiency	Energia Qsol (75°C) singolo collettore / Single collector energy Qsol (75°C) Atene/Athens	kWht/anno	3978			
	Producibilità specifica / Annual output per m2 gross area Atene/Athens	kWht/m2anno	1236,34			

#### Range of colors

RAL 9010 white RAL 7016 dark gray RAL 6005 green RAL 5012 light blue

estimated output - Italy:		kWhth.		30.000/42.000	
Equivalenti a /		Altri combustibili		CO2 Kg Emissioni Emission	
20		10 specchi 10 mirrors	14 specchi 14 mirrors	10 specchi 10 mirrors	14 specch 14 mirrors
Metano / CH4	Smc	3.146	4.404	6.300	8.820
GPL / LPG	Lt	4.603	6.467	7.200	10.080
Gasolio / Diesel	Lt	3.272	4.581	8.400	11.760
Legna (25%) / Wood (25%)	Ka	7.819	10,947	1.500	2,100





# Solarkeymark Kiwa N° 16223 Rev.0. Test report ENEA N° RP.2019.COL.204.2





Potenza del singolo collettore / Single collector power

Potenza di picco (G = 1000 W/m<sup>2</sup>) per singolo collettore: Single collector peak power (G = 1000 W/m<sup>2</sup>):

3510 W<sub>peak</sub>

<b>.</b>	Radiazione diretta / Direct normal irradiance (DNI)			
$I_m - I_a$ [K]	400 W/m <sup>2</sup>	700 W/m <sup>2</sup>	1000 W/m <sup>2</sup>	
0	1404	2457	3510	
10	1374	2427	3480	
30	1245	2298	3351	
50	1023	2076	3129	
70	709	1762	2815	
90	302	1355	2407	