

THEIA™ HE-t

The THEIA™ HE-t range defines a new level of efficiency, flexibility and user friendliness for isolated string inverters. Suitable for all PV cell technologies, and ready for use all over the world, the THEIA™ HE-t is the perfect choice for any PV installation.



THEIA™ HE-t

SOLAR INVERTERS: 2.0 kW – 4.6 kW

PERFORMANCE

- Maximum efficiency 97.3 % with galvanic isolation
- Suitable for use with all PV modules of any technology, with the ability to ground the positive or the negative terminal on the DC side
- Compliance with the highest international safety standards
- Early startup and high efficiency at low irradiation gives longer operation time and higher energy yields

RELIABILITY

- High quality components, with a robust design
- Bespoke Maximum Power Point Tracking
- Stable operation under extremely dynamic irradiation conditions
- IP65 protection level

EASE OF USE

- Lightweight and easy to install
- With or without DC Disconnect Switch
- Color screen with touch sense buttons
- Intuitive user interface

MONITORING AND COMMUNICATION

- Complete site overview from one single inverter
- Integrated webserver with easy-to-use monitoring software
- Multilanguage display

MODEL	2.0 HE-t	2.9 HE-t	3.8 HE-t	4.4 HE-t	4.6 HE-t
INPUT DATA					
Nominal DC power	2100 W	3000 W	4000 W	4600 W	4800 W
Max. PV power	2625 W _p	3750 W _p	5000 W _p	5750 W _p	6000 W _p
Max. DC voltage	600 V _{dc}				
Voltage range MPPT	230 to 480 V _{dc}	230 to 480 V _{dc}	230 to 480 V _{dc}	230 to 480 V _{dc}	230 to 480 V _{dc} ¹⁾
Max. input current	9.5 A	13.5 A	18.0 A	21.0 A	21.0 A
Number of PV string inputs	3				
Number of MPP trackers	1				
Input features	Reverse polarity protection, Ground fault monitoring, Integral DC switch disconnecter (optional), Integral DC fuses for string inputs (optional), Field configurable for positive or negative grounding, or ungrounded				

OUTPUT DATA					
Nominal output power	2000 W	2900 W	3800 W	4450 W	4600 W
Max apparent power	2000 VA	2900 VA	3800 VA	4450 VA	4600 VA
Nominal AC current	9.0 A	13.0 A	17.0 A	19.5 A	20.0 A
Max. AC current	10.5 A	15.2 A	19.7 A	23.0 A	23.0 A
Mains output voltage	230 Vac (+/-20 %) single or split phase				
Mains frequency	50 Hz / 60 Hz (+/-10 %)				
Cos Phi (power factor)	0.8i to 0.8c selectable				

PERFORMANCE DATA					
Maximum efficiency	97.2 %	97.2 %	97.2 %	97.3 %	97.3 %
CEC efficiency	96.8 %	96.8 %	97.0 %	97.0 %	97.0 %
EU efficiency	96.3 %	96.5 %	96.7 %	96.9 %	96.9 %
Power feed starts at	< 7 W				
Night mode power	< 1 W				

MECHANICAL DATA					
Protection degree (EN 60529)	IP 65				
Dimensions	610 H x 353 W x 154 D mm / 24.02 H x 13.90 W x 6.06 D inches				
Weight	< 19 kg / 42 lbs	< 19 kg / 42 lbs	< 21 kg / 46 lbs	< 21 kg / 46 lbs	< 21 kg / 46 lbs
Cable access	Bottom				
Input cable connection	MC3, MC4, Tyco, Screw terminals, Cable clamp, Others on request				
Output cable connection	Screw terminals, Cable clamp				

DESIGN STANDARDS					
EM compatibility	EN 61000-6-2, EN 61000-6-3				
CE marking	Yes				
Other standards	DIN VDE V 0126-1-1, G83/1, EN 50438, AS 4777, CEI 0-21, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12, IEC 62109-2, IEC 61727, UTE C 15-712-1, C10/11, VDE AR-N 4105, RD1663, G59/2				

ENVIRONMENTAL DATA					
Operating temperature	- 25 °C to + 65 °C / - 13 to + 149 °F (possible power derating above + 45 °C / + 113 °F)				
Storage temperature	- 30 °C to + 80 °C / - 22 to + 176 °F				
Ventilation	Convection cooling				

ADDITIONAL FEATURES		EFFICIENCY CURVE THEIA 4.4 HE-t
Topology	High frequency transformer, galvanic isolation	
Protection class / Overvoltage category	I / III	
Noise Emission	< 37 dB (A)	
Communication	Graphical, color display with touch sense buttons, Embedded web-server, Ethernet, CAN and RS485 bus interface, 3x LEDs for visual status indication	
Warranty	5 years, 10 years, 15 years, 20 years and 25 years options	

1) Output power limitation 230 V_{dc} to 250 V_{dc}