

THEIA™ HE-t UL

The THEIA™ HE-t UL takes high performance and user friendliness to a new level for isolated string inverters. Suitable for all PV cell technologies, and certified to UL1741, the THEIA™ HE-t is the perfect choice for any PV installation.



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SOLAR INVERTERS: 2.0 kW – 4.4 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
- Proprietary Maximum Power Point Tracking
- Stable operation under extremely dynamic irradiation conditions
- NEMA 4X protection level

EASE OF USE

- Lightweight and easy to install
- 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 UL	2.9 HE-t UL	3.8 HE-t UL	4.4 HE-t UL
INPUT DATA				
Nominal DC power	2100 W	3000 W	4000 W	4600 W
Max. PV power	2625 W _p	3750 W _p	5000 W _p	5750 W _p
Max. DC voltage	600 V _{dc}			
Voltage range MPPT	230 to 500 V _{dc}	230 to 500 V _{dc}	230 to 500 V _{dc}	230 to 500 V _{dc}
Max. input current	9.5 A	13.5 A	18.0 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 fuses for string inputs (optional) Field configurable for positive or negative grounding.			

OUTPUT DATA				
Nominal output power	2000 W	2900 W	3800 W	4450 W
AC current (240 V _{ac} / 208 V _{ac})	8.5 A / 10.0 A	12.0 A / 14.0 A	16.0 A / 18.5 A	18.5 A / 21.5 A
Mains output voltage	240 V _{ac} (+13 % / -25 %) or 208 V _{ac} (+29 % / -14 %) single or split phase ¹⁾			
Mains frequency	60 Hz (+ 5 %, - 8.3 %)			
Cos Phi (power factor)	0.8i to 0.8c selectable			

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

MECHANICAL DATA				
Protection degree	NEMA 4X or 3R			
Dimensions	720 H x 353 W x 165 D mm / 28.35 H x 13.90 W x 6.50 D inches			
Weight	< 22 kg / 49 lbs	< 22 kg / 49 lbs	< 23 kg / 51 lbs	< 23 kg / 51 lbs
Cable access (conduit knockouts)	2 x 3/4" + 2 x 1" base, 1 x 3/4" + 1 x 1" sides and back			
Input cable connection	Screw terminals / Cable clamp			
Output cable connection	Screw terminals / Cable clamp			

DESIGN STANDARDS				
EM compatibility	FCC Level B, EN 61000-6-2, EN 61000-6-3			
UL marking	Yes			
Other standards	UL 1741, IEEE 1547, IEC 61000-3-2/11, IEC 61000-3-3/12			

ENVIRONMENTAL DATA				
Operating temperature	- 25 °C to + 60 °C / - 13 to + 149 °F (possible power derating above + 45 °C / + 113 °F)			
Storage temperature	- 40 °C to + 80 °C / - 22 to + 176 °F			
Ventilation	Convection cooling			

ADDITIONAL FEATURES		EFFICIENCY CURVE THEIA 4.4 HE-t UL
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, and 20 years options	