

Titan Residential Inverter

Titan 16K

Model	16K
PV Input Data	
Recommended Max. PV Power	25.6 kW
Max. Input Voltage	550 V
Rated Voltage	380 V
Start-up Voltage	100 V
MPPT Voltage Range	100-450 V
Full load MPPT Voltage Range	186-450 V
Max. Input Current per MPPT	40 A
Max. Short Circuit Current per MPPT	50 A
Number of MPPTs / Number of Strings per MPPT	3 / 2
Battery Input Data	
Battery Type	Li-ion / Lead-acid
Battery Voltage Range	40 - 60 V
Max. Charge / Discharge Current	290 A
Communication	CAN / RS485
AC Output (Grid)	
Rated Output Power	16 kW
Max. Output Apparent Power	16 kVA
Rated Output Voltage	240 V
Rated Frequency	60 Hz
Rated Grid Output Current	66.7 A
Max. Output Current	66.7 A
Locked Rotor Amp Rating	200.1 A
THDi	< 3%

Titan 16K Continued

Model	16K
AC Input (Grid)	
Input Voltage Range	211 - 264 V
Max. Input Current	200 A
Frequency Range	58.8 - 61.2 Hz
AC Output (Backup and Off-gird)	
Rated Output Power	16 kW
Max. Output Apparent Power	32 KVA for 10 seconds & 48 KVA for 1 second
Backup Transfer Time	< 10 ms
Phase Power	L1/L2/N(PE), 120 V / 240 V (split phase)
Rated Output Voltage (L1-L2)	240 V
AC Output Voltage Range	211 - 264 V
Rated Frequency	60 Hz
Rated Output Current	66.7 A
Max. Output Overcurrent Protection, 10 sec	133.3 A
Max. Continuous AC Passthrough	200 A
Max. Allowable Phase Imbalance	50%
Backup Support Configurations	Partial and Whole Home Backup
Power Factor	> 0.99 (0.8 leading - 0.8 lagging)
THDv (@Linear Load)	< 3%
Generator Input	
Max. Input Power	24 kW
Max. Input Current	100 A
Rated Input Frequency	60 Hz
Efficiency	
Max. Efficiency	96.02%
CEC Efficiency	95.45%
Battery Charged by PV Max. Efficiency	96.21%
Round-Trip Efficiency	94.16%/94.22%
Protection	
Ground Fault Monitoring	Yes
Integrated AFCI	Yes
DC Reverse-Polarity Protection	Yes (PV only)
Rapid Shutdown	Integrated SunSpec-certified Transmitter
Protection Class / Category Overvoltage	I / II
General Data	
Dimensions (H x W x D)	21.02 × 36.61 × 11.69 in (534 × 930 × 297 mm)
Weight	145.06 lbs (65.8 kg)
Inverter Topology	Non-isolated (PV), Isolated (Battery)
Operating Ambient Temperature Range	-13°F to 140°F (-25°C to 60°C)
Ingress Protection	TYPE 4X
Self-Consumption (night)	< 35 W
Noise Emission (typical)	<65 dB(A)
Cooling Method	Intelligent fan-cooling
Relative Humidity Range	0 - 100%
Mounting Method	Wall Bracket
Max. Operation Altitude	13120 ft (4000 m)
Safety Certifications	UL 1741 PVRSS, UL 1699B, UL 1998 (US), UL 1741, UL 1741 SB, CSA C22.2107.1-1
Grid Certifications	IEEE 1547-2018, IEEE1547.1-2020, CA Rule 21, SRD 2.0, Puerto Rico LUMA, Hawaii HECO
Emissions	FCC Part 15 Class B
Features	
DC connection	Terminal Block (PV port) / Terminal Block (BAT port)
AC connection	Terminal Block
Interface	7.0" LCD display & Bluetooth + APP
Revenue grade meter	Optional
Monitoring platform	SolisCloud (Modbus map and API sharing available upon request)
Communication	RS485, Optional: Cellular, Wi-Fi, LAN