



- 1.6 times DC overmatched  
1.1 times AC overload
- IP66
- 12 trackers MPPT
- Fault detection
- IV scan & intelligent diagnosis
- PID matching

# Smart String Inverter (Three Phase)

**100kW~136kW**

## Technical Data

Model	TPV300-100K-YT1	TPV300-110K-YT1	TPV300-110K-YT1	TPV300-136K-YT1
<b>PV String Input Data</b>				
Max. DC Input Power (kW)	120	132	132	160
Max. DC Input Voltage (V)	1100			
Start-up Voltage (V) / Min. Operating Voltage	250 / 180			
MPPT Range (V)	180 ~ 1000			
No. of MPPT Trackers / No. of Strings Per MPPT Tracker	9 / 2	10 / 2	12 / 2	12 / 2
Max. Input Current Per MPPT Tracker (A) ×No. of MPPT Trackers	26×9	26×10	26×12	26×12
<b>AC Output Data</b>				
Max. AC Output Power (kVA)	110	121	121	150
Max. AC Output Current (A)	158.8	174.6	174.6	174.6
Nominal Output Power (kW)	100	110	110	136
Nominal Output Voltage (V)	230 / 400		277 / 480	
Power Factor	-0.8 ~ +0.8 (Adjustable)			
Harmonic Distortion	<3% (Rated power)			
Rated Grid Voltage (V) / Frequency (Hz)	230V / 400V, 3L + N + PE / 3L + PE, 50Hz / 60±5Hz (Adjustable)			277V / 480V, 3L + N + PE / 3L + PE, 50Hz / 60±5Hz (Adjustable)
<b>Efficiency</b>				
Max. Efficiency	98.70%			
China Efficiency	98.30%			
MPPT Efficiency	99.90%			
<b>Protection</b>				
Protection Function	DC Input Switch, Input Over Current Protection, Output Over Voltage Protection, String Fault Detection, AC Shorted Protection, AC Output Over Current Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Surge Protection, Anti-islanding Protection, Temperature Protection, Ground Fault Monitoring, DC Type II Surge protection(40KA), AC Type II Lightning Protector, Grid Monitoring, etc.			
<b>Display and Communication</b>				
Display	LED / BT + APP			
Communication with BMS	RS485 (Standard) / WiFi / BT (Adjustable) / USB (Standard) / DRM			
<b>Criteria met</b>				
Grid Regulation	VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100, EN61000-6-1:4, EN61000-3-2:3, EN61000-11:12, IEC62109-1:2010			
Safety / EMC	VDE-AR-N4105, AS4777/3100, CQC new source performance standards			
<b>General Data</b>				
Cooling	Intelligent Air Cooling			
Protection Degree	IP66			
Night Power Consumption	<1W			
Topology	Transformerless			
Operating Temperature Range (°C)	-25 ~ +60 (> 45 Derating)			
Relative Humidity	0 ~ 100%			
Max. Altitude (m)	0~4000 (> 3000 Derating) )			
Size (mm)	650 × 440 × 260			
Weight (kg)	95	98	98	101
Warranty	5 Years (Standards) / 10 Years (Optional)			