2024_V1

Tenka Power Center 3000 PRO - Three Phase Inverter

Tenka Power Center 3000 PRO - Three Phase Inverter - Main benefits

3-phase backup power
UPS level emergency backup power
to supply the entire household

Tenka Power Cloud App
For easy commissioning and
24/7 system monitoring

150% oversizing
150% PV array oversizing
for higher yields

Arc fault circuit interuptor
AFCI protection reduces fire risk
resulting from DC arcs.

Maximum design flexibility
up to 3 MPPTs for versatility in
PV system design and layout.

Discreet and silent
Natural air-cooling ensures
discreet and silent operation

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Tenka Power Center 3000 PRO	3 KW	4 KW	5 KW	6 KW
Input (DC)				
Max. PV array power	4500 Wp STC	6000 Wp STC	7500 Wp STC	9000 Wp STC
Max. input voltage	1100 V			
MPP voltage range / rated input voltage	150V - 1000 V / 630 V			
Min. input voltage	125 V			
Initial. feed-in voltage	180 V			
Max. operating input current	16A / 16A			
Max. short circuit current	25A / 25A			
No. of independent MPPT inputs / strings per MPPT input	2 / A:1; B:1			
Output (AC)				
Rated active power	3000 W	4000 W	5000 W	6000 W
Rated apparent power	3000 VA	4000 VA	5000 VA	6000 VA
Max. apparent power	3000 VA	4000 VA	5000 VA	6000 VA
AC nominal voltage	220 V / 380 V 230 V / 400 V 240 V / 415 V			
AC voltage range	160 V to 300 V			
AC grid frequency / range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz			
Max. output current	4.8A	6.4A	8.0A	9.6A
Adjustable power factor range	0.8 leading to 0.8 lagging			
Feed-in phases	3 / 3-N-PE			
Harmonic distortion (THD) at rated output	< 3%			
Efficiency & Protection				
Max. efficiency / European efficiency	98.3% / 97.9%			
DC switch	●			
Ground fault monitoring / grid monitoring	● / ●			
DC reverse polarity protection / AC short circuit protection	● / ●			
All-pole-sensitive residual-current monitoring unit	●			
Arc fault circuit interrupter (AFCI)	●			
Anti-islanding Protection	●			
Surge Protection	Type II			
Protection class (IEC 62109-1 / IEC 62109-1)	I / AC: III; DC: II			
General Data				
Dimensions (W / H / D)	503 / 435 / 183 mm			
Weight	< 15 kg			
Operating temperature range	-25°C ... +60°C			
Self-consumption (at night)	< 1 W			
Topology	Non-isolated			
Cooling concept	Natural convection			
Degree of protection (according to IEC 60529)	Ip66			
Climatic category (according to IEC 60721-3-4)	4K4H			
Max. permissible value for relative humidity (non-condensing)	100%			
Max. operating altitude	3000 m			
Features				
DC Connector	Plug-in connector			
AC Connector	Plug-in connector			
Mounting type	Wall-mount bracket			
LED indicators (Status / Fault / Communication)	●			
Communication interface (RS485 / WiFi / LAN / 4G)	● / ● / ○ / ○			
Country of manufacture	China			
Certificates and approvals (more available on request)	CE, EN50549, G98/99, VDE-AR-N4105, AS/NZS 4777, C10/C11, VFR 2014 & UTE C15, IEC62109, IEC62116, IEC61727, IEC61683, IEC60068, IEC61000, NB/T 32004			

● Standard features ○ Optional features

[1] Zero export installations supported with 2-pin RS485 for connection to approved smart meters
[2] DRED supported with RS485 communication for Australia & New Zealand
[3] The overload setting is disabled as default for AS/NZS4777 grid codes
All information is subject to change | Version: Jan 2024

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Tenka Power Center 3000 PRO

Tenka Power Center 3000 PRO	8 KW	10 KW	12 KW	
Input (DC)				
Max. PV array power	12000 Wp STC	15000 Wp STC	18000 Wp STC	
Max. input voltage	1100 V			
MPP voltage range / rated input voltage	150V - 1000 V / 630 V			
Min. input voltage	125 V			
Initial. feed-in voltage	180 V			
Max. operating input current	20A / 16A		32A / 20A	
Max. short circuit current	30A / 25A		48A / 30A	
No. of independent MPPT inputs / strings per MPPT input	2 / A:1; B:1		2 / A:2; B:1	
Output (AC)				
Rated active power	8000 W	10000 W	12000 W	
Rated apparent power	8000 VA	10000 VA	12000 VA	
Max. apparent power	8000 VA	10000 VA	13200 VA [3,4]	
AC nominal voltage	220 V / 380 V 230 V / 400 V 240 V / 415 V			
AC voltage range	160 V to 300 V			
AC grid frequency / range	50 Hz / 45 Hz to 55 Hz 60 Hz / 55 Hz to 65 Hz			
Max. output current	12.8A	16.0A	19.1A	
Adjustable power factor range	0.8 leading to 0.8 lagging			
Feed-in phases	3 / 3-N-PE			
Harmonic distortion (THD) at rated output	< 3%			
Efficiency & Protection				
Max. efficiency / European efficiency	98.6% / 98.2%			
DC switch	●			
Ground fault monitoring / grid monitoring	● / ●			
DC reverse polarity protection / AC short circuit protection	● / ●			
All-pole-sensitive residual-current monitoring unit	●			
Arc fault circuit interrupter (AFCI)	●		-	
Anti-islanding Protection	●			
Surge Protection	Type II			
Protection class (IEC 62109-1 / IEC 62109-1)	I / AC: III; DC: II			
General Data				
Dimensions (W / H / D)	503 / 435 / 183 mm			
Weight	17.3 kg			
Operating temperature range	-25°C ... +60°C			
Self-consumption (at night)	< 1 W			
Topology	Non-isolated			
Cooling concept	Natural convection		Active Cooling	
Degree of protection (according to IEC 60529)	Ip66			
Climatic category (according to IEC 60721-3-4)	4K4H			
Max. permissible value for relative humidity (non-condensing)	100%			
Max. operating altitude	3000 m			
Features				
DC Connector	Plug-in connector			
AC Connector	Plug-in connector			
Mounting type	Wall-mount bracket			
LED indicators (Status / Fault / Communication)	●			
Communication interface (RS485 / WiFi / LAN / 4G)	● / ● / ○ / ○			
Country of manufacture	China			
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