V-TAC
Meaningful Innovation.

Three Phase
Hybrid Inverters

- 100% unbalanced output, each phase
- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 50A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

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	10kW	15kW	20kW
	SKU: 12168 EAN: 3800170225114	SKU: 12169 EAN: 3800170225121	SKU: 12170 EAN: 3800170225138
Battery Input Data			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-700		
Max. Charging Current (A)	37		
Max. Discharging Current (A)	37		
Charging Strategy for Li-ion Battery	Self-adaption to BMS		
Number of Battery Input	1		
PV String Input Data			
Max. PV Input Power (W)	13000	19500	26000
Max. PV Input Voltage (V)	1000		
Start-up Voltage (V)	180		
MPPT Voltage Range (V)	150-850		
Rated PV Input Voltage (V)	600		
Max. Operating PV Input Current (A)	20+20	26+20	26+26
Max. Input Short-Circuit Current (A)	30+30	39+30	39+39
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/1+1	2/2+1	2/2+2
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	10000	15000	20000
Max. AC Input/Output Apparent Power (VA)	11000	16500	22000
Rated AC Input/Output Current (A)	15.2/14.5	22.8/21.8	30.4/29
Max. AC Input/Output Current (A)	16.7/16	25/24	33.4/31.9
Max. Three-phase Unbalanced Output Current (A)	22	30	35
Max. Continuous AC Passthrough (grid to load) (A)	40	80	80
Peak Power (off-grid) (W)	1.5 times of rated power, 10s		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65		
Grid Connection Form	3L+N+PE		
Total Current Harmonic Distortion THDi	<3% (of nominal power)		
DC Injection Current	<0.5% In		
Efficiency			
Max. Efficiency	97.6%		
Euro Efficiency	97.0%		
MPPT Efficiency	>99%		
Equipment Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Interface			
Communication Interface	RS485/RS232/CAN		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range (℃)	-40 to +60℃, >45℃ Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	2000m		
Noise (dB)	≤55		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (WxHxD mm)	408×638×237 (Excluding Connectors and Brackets)		
Weight (kg)	30.5		
Type of Cooling	Intelligent Air Cooling		
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy		
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105		
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		