

V-TAC

Meaningful Innovation.

9.60kWh

Rack Mounting Lithium Battery

05 YEAR
WARRANTY

TELECOM LITHIUM BATTERY



V-TAC.EU

| VTACEXPORTS.COM

TUV NORD

CE RoHS

LISTING DETAILS

Model No: **VT-48200B**

SKU Code: **11523**

EAN Code: **3800157693578**

MASTER BOX PACKAGING

Qty Per Pallet: **14pcs per pallet**

Net Weight : **Approx. 81kg**

Product Size : **445*244*500mm**

GENERAL DATA

Nominal Capacity 200Ah@0.2C, 25°C

Nominal Voltage 48.0V

Rated Charge Voltage 54.0V

Max Continuous Charge Current 100A@25°C

Discharge Cut-off Voltage 40.5V

Max Continuous Discharge Current 100A@25°C

Temperature Range of Charge 0°C- 60°C

Temperature Range of Discharge -20°C- 60v

Allowed Humidity Range ≤95%RH approx.

IP IP 20

CONSTANT CURRENT DISCHARGE DATA / 25°C

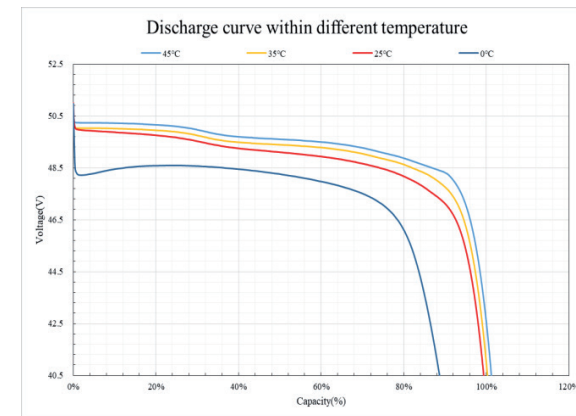
Current/A End voltage/V	0.1C	0.2C	0.3C	0.4C	0.5C
	Hours				
45.0V	9.77	4.78	3.20	2.33	1.82
43.5 V	9.89	4.88	3.28	2.43	1.93
42.0V	10.01	5.00	3.35	2.46	1.98
40.5 V	10.06	5.06	3.40	2.54	2.00

CONSTANT POWER DISCHARGE DATA / 25°C

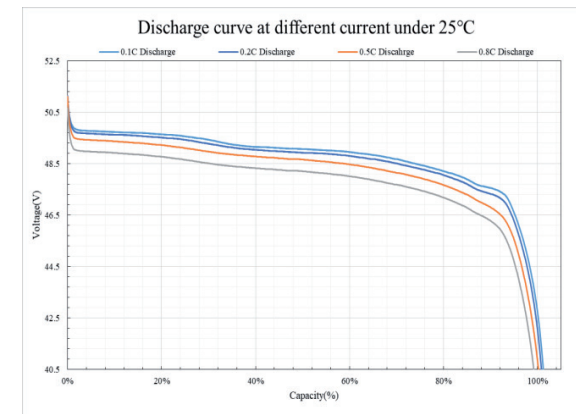
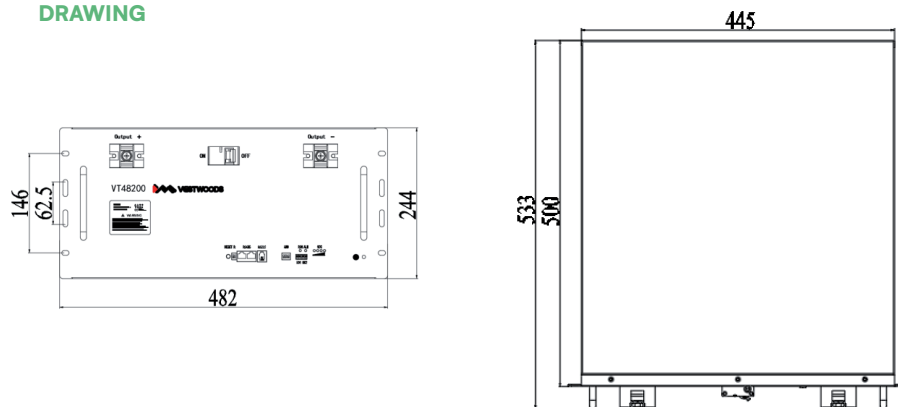
Power/W End voltage/V	960	1920	2880	3840	4400
	Hours				
45.0V	9.75	4.76	3.18	2.31	1.80
43.5 V	9.87	4.85	3.25	2.40	1.90
42.0V	10.02	4.96	3.31	2.47	1.94
40.5 V	10.08	5.11	3.36	2.50	1.96

- High quality LFP cells
- High rate charge / discharge current @ 100A
- High efficiency between charge and discharge
- Multiple protection methodes based on patented
- BMS Intelligent anti-theft solution, LCD(optional)
- Modbus/CAN/SNMP V2/SNMP V3 (optional)

TECHNICAL CURVES



DRAWING



Residential Storage Inverter



Solar+Storage Hybrid Inverter



High Efficiency



Multi-unit Parallel



Wide Range of Power



Strong Battery Voltage Compatibility



VPP Interface Ready

Single Phase Hybrid Inverter

	3.6KW SKU: 12157 EAN: 3800170224773	5KW SKU: 12158 EAN: 3800170224780	6KW SKU: 12156 EAN: 3800170224766
Off-grid Output			
Nominal Output Power	3600W	5000W	6000W
Nominal Voltage	230V		
Nominal Frequency	50/60Hz		
Nominal Output Current	16.4A	22.7A	27.2A
THDu	<2%		
On-grid Parameter			
Nominal Output Power	3600W	5000W	6000W
Max. Output Current	16.4A	22.7A	27.2A
Nominal Grid Voltage	230V		
Max. loutput Current from Grid	22.7A	27.2A	27.2A
Grid Voltage Range	184-264V		
Frequency Range	45-65Hz		
PV Input			
Max. Input Power	6000Wp	7500Wp	9000Wp
Starting Voltage	95V		
Max. Input Voltage	600V		
MPPT Voltage Range	80-550V		
Full Load MPPT Voltage Range	350-500V		
Number of MPPT	2		
Max. Input String Per MPPT	1		
Nominal Input Voltage	360V		
Max. Input Current	18A/18A		
Battery Parameter			
Battery Type	Lithium-ion battery		
Nominal Battery Voltage	51.2V		
Battery Voltage Range	42-58V		
Max. Charging Voltage	≤60V		
Max. Charging/Discharging Current	85A	100A	100A
Efficiency			
Max. Efficiency	97.80%	98.00%	98.00%
European Efficiency	97.30%	97.50%	97.50%
Max. Battery Charging/Discharging Efficiency	95.20%		
General Data			
Size(L*W*H)	500mm*470mm*180mm		
Weight	21kg		
Noise	<25dB(A)		
Operating Temperature Range	-25°C~+60°C		
Cooling Method	Natural cooling		
Ingress Protection Grade	IP65		
Monitoring	H5/LED/APP/WIFI/4G/Bluetooth		
Communication Port	RS485/CAN/DRED/DO/Parallel port		
Protection	DC Switch, PV Insulation Resistance Detection, Residual Current Monitoring, Anti-islanding Protection, Reverse Polarity Protection(PV) AC Short Circuit Protection, AC Overcurrent Protection, AC Overvoltage Protection, Surge Protection, Lightning Protection II		
Certification			
CE_LVD	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2		
CE EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4		
Grid	VDE-AR-N 4105, G99, CEI 0-21, EN50549 NRS 097-2-1, R25,C10-11,NTS 2.1		

Single Phase Hybrid Inverter

Higher Reliability

IP65 Outdoor and Indoor use
Natural cooling, Ultra silence
SiC technology, Longer lifespan
Plug-in design, Easy to install

High Capability

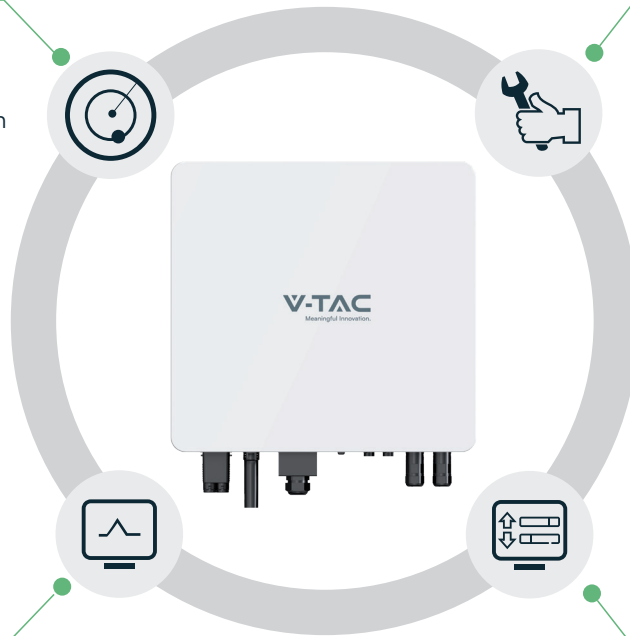
15 units in parallel
2 independent ports for battery
Support mixture use of old & new battery

Auto sleep
VPP interface ready
Cloud + Smart data analysis

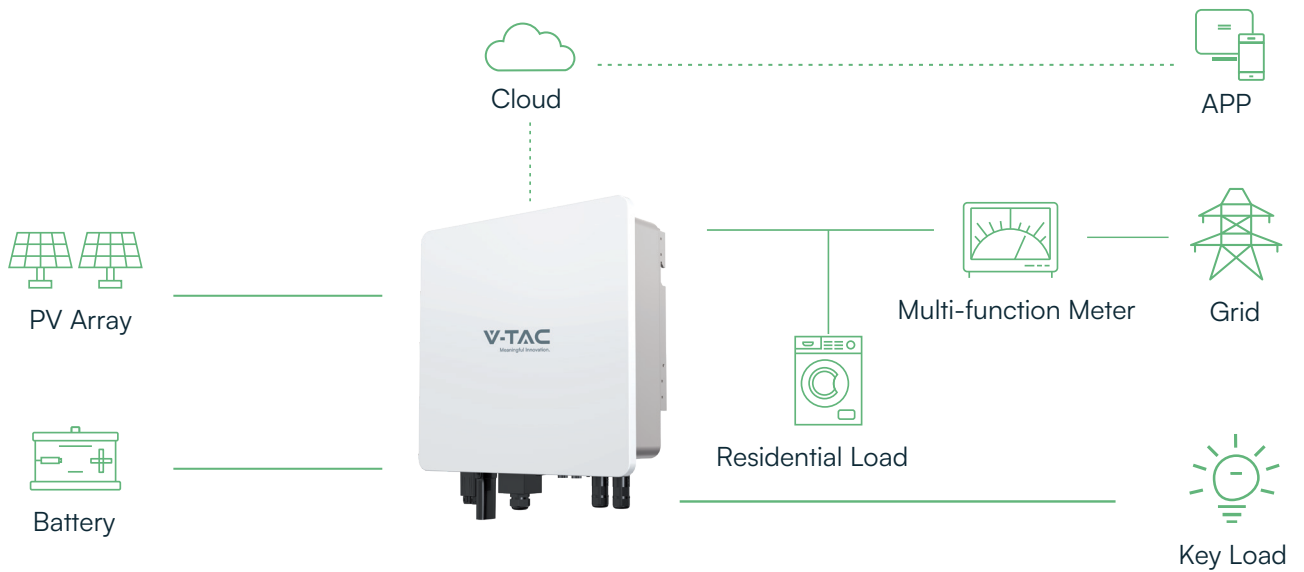
Smart Monitoring

UPS function
Flexible DO control
10ms on/off-grid switchover
100% three phase unbalance

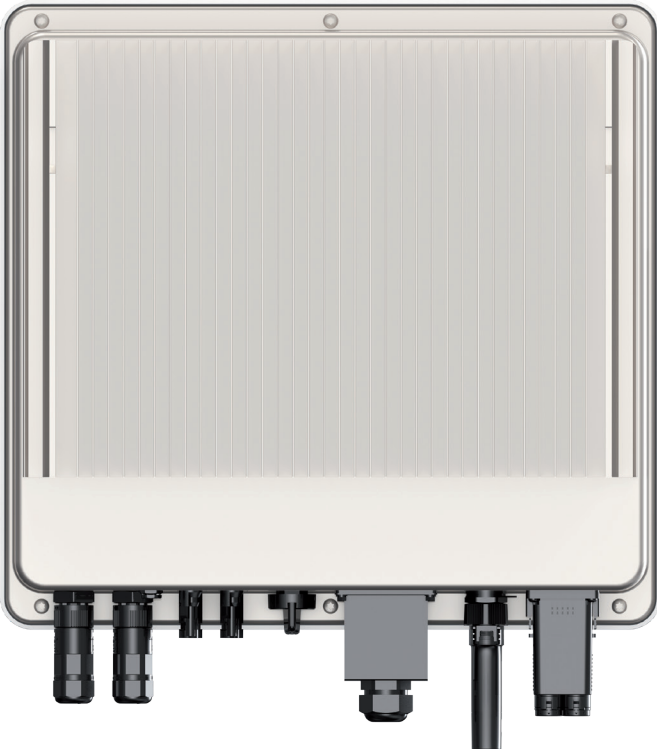
Strong Load Adaptability



Typical Configuration

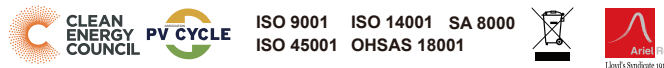


Single Phase Hybrid Inverter



Tier1

BloombergNEF



M10 TOPCON BIFACIAL

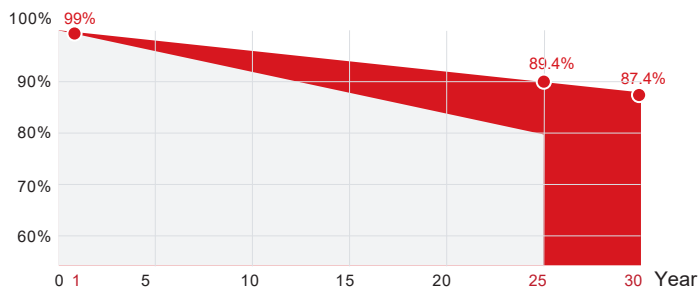
SPDGxxx-N108M10

410~440W

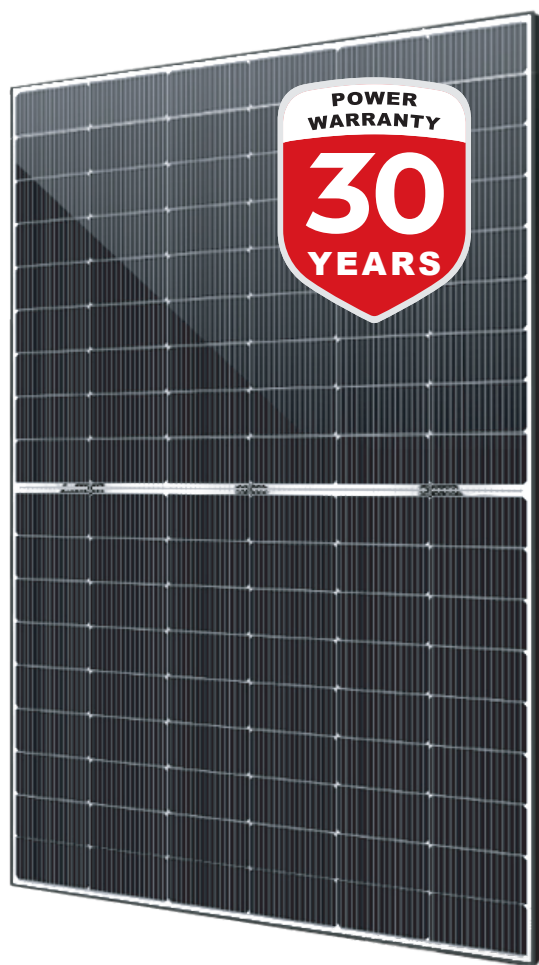
- Double glass
- Black frame
- Bifacial Transparent

25 Yr quality guarantee | 30 Yr power warranty

■ SUNPRO TOPCon module (Additional value from 30-year warranty)
 ■ Common module



*SUNPRO Standard tiered warranty



WARRANTY & GUARANTEE

Linear output power guarantee
25 years: 89.4% power output
30 years: 87.4% power output



WITHSTAND STRONG

Snow load 5400Pa
Wind load 2400Pa



PID RESISTANCE

Power positive tolerance: 0~+5W.
The attenuation probability of PID phenomenon is minimized through battery production technology optimization and material control



R&D AND PRODUCTION

Advanced production line. Bifaciality>80%, effectively improves backside power generation. The leading solar cell cutting process and multi busbar design with SUNPRO Technology.



HIGH EFFICIENCY

N-type. Components have better reliability and lower LID/LETID attenuation. Efficiency can reach 22.53%. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.

Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m², Cells Temperature 25)

Typical type	410W	415W	420W	425W	430W	435W	440W
Max power(Pmax)	410	415	420	425	430	435	440
Max power voltage(Vmp)	31.25	31.37	31.49	31.64	31.79	31.94	32.09
Max power current(Imp)	13.12	13.23	13.34	13.44	13.53	13.62	13.72
Open circuit voltage(Voc)	37.94	38.04	38.13	38.24	38.34	38.43	38.53
Short circuit current(Isc)	13.85	13.96	14.07	14.16	14.25	14.34	14.43
Module Efficiency(%)	21.00	21.25	21.51	21.76	22.02	22.28	22.53
Max system voltage	DC 1500V (TÜV,UL)						
Maximum Series Fuse Rating	30A						

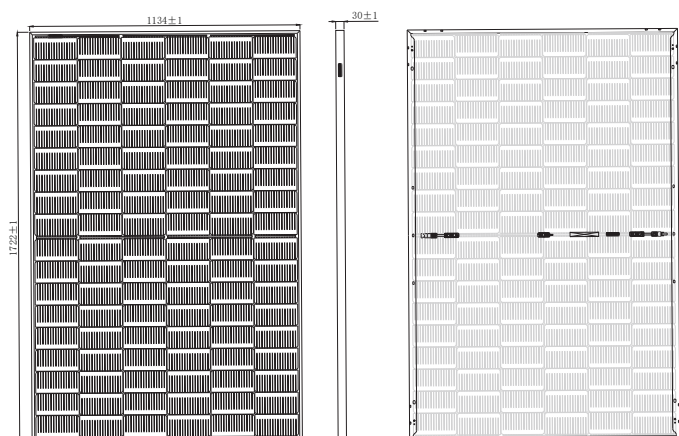
Electrical Characteristics with 15% Rear Side Power Gain (Take 420W as an example)

Front power Pmax/W	410W	415W	420W	425W	430W	435W	440W
Total power Pmax/W	471.50	477.25	483.00	488.75	494.50	500.25	506
Max power voltage(Vmp)	31.25	31.37	31.49	31.64	31.79	31.94	32.09
Max power current(Imp)	15.09	15.21	15.34	15.45	15.56	15.66	15.77
Open circuit voltage(Voc)	37.94	38.04	38.13	38.24	38.34	38.43	38.53
Short circuit current(Isc)	15.93	16.05	16.18	16.28	16.39	16.49	16.59

Electrical parameters at NMOT test conditions (Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1 m/s)

Typical type	410W	415W	420W	425W	430W	435W	440W
Max power(Pmax)	308	312	316	320	324	325	329
Max power voltage(Vmp)	29.4	29.5	29.6	29.7	29.9	29.80	29.90
Max power current(Imp)	10.49	10.58	10.67	10.75	10.84	10.91	11.00
Open circuit voltage(Voc)	35.7	35.8	35.9	36	36.1	36.00	36.10
Short circuit current(Isc)	11.16	11.25	11.34	11.41	11.48	11.56	11.63

DIMENSIONS AND STRUCTURE



Mechanical Data

Dimensions	1722x1134x30mm
Weight	23.3kg
Glass	(F) 2.0mm ultra clear embossed double layer colorless glass (B) 2.0mm semi-tempered glass
Output cables	4mm ² , symmetrical lengths 1100mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline, N type Bifacial, 182x91mm
Number of cells	108cells(Half-Cell)

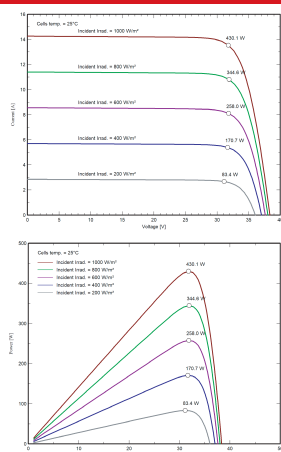
Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.045% / °C
Temp.Coeff.of Voc(TK Voc)	-0.25% / °C
Temp.Coeff.of Pmax(TK Pmax)	-0.30% / °C
Operating temperature	-40~+85°C
Normal operating cell temperature	42±2°C

Packing Configuration

Container	40'HQ
Pieces per pallet	72
Pallets per container	13
Pieces per container	936

I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE, CEC, UL, WEEE
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0~+5W
Junction box	IP 68
Warranties	25 years product warranty and 30 years 87.4% of power