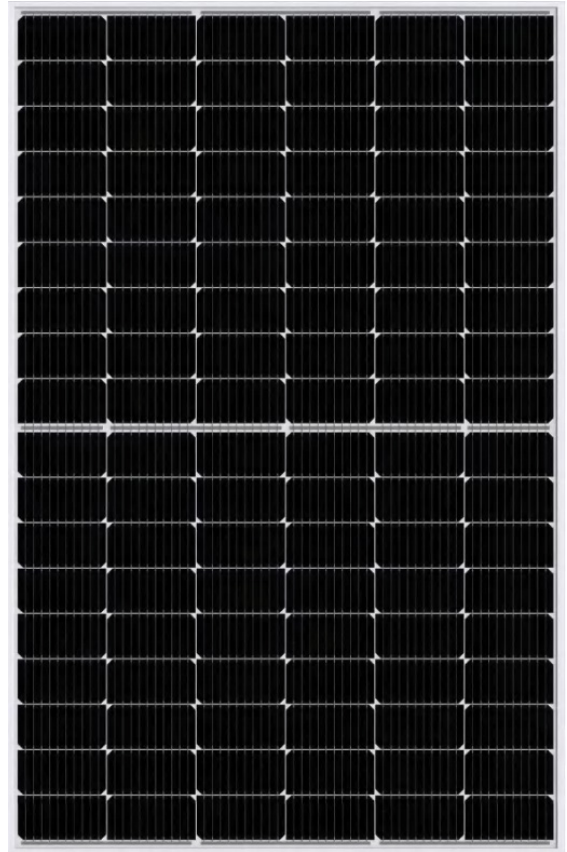
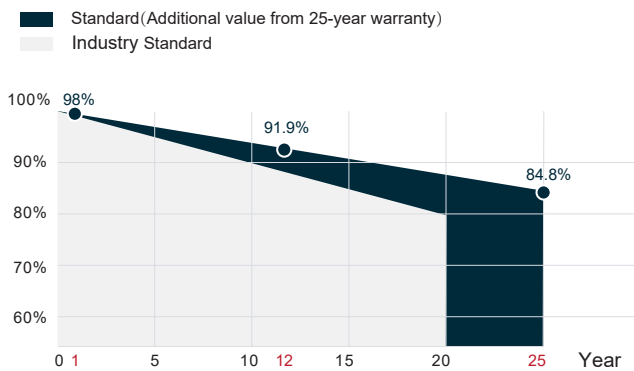




Tier 1 410W Solar Panel

SKU: 11899 Silver frame

12Yr quality guarantee | 25Yr power warranty



WARRANTY & GUARANTEE

Linear output power guarantee
 12 years: 91.9% power output
 25 years: 84.8% power output



WITHSTAND STRONG

Snow load 5400Pa
 Wind load 2400Pa



R&D AND PRODUCTION

Advanced production line.
 The leading solar cell cutting process and multi busbar design.



HIGH EFFICIENCY

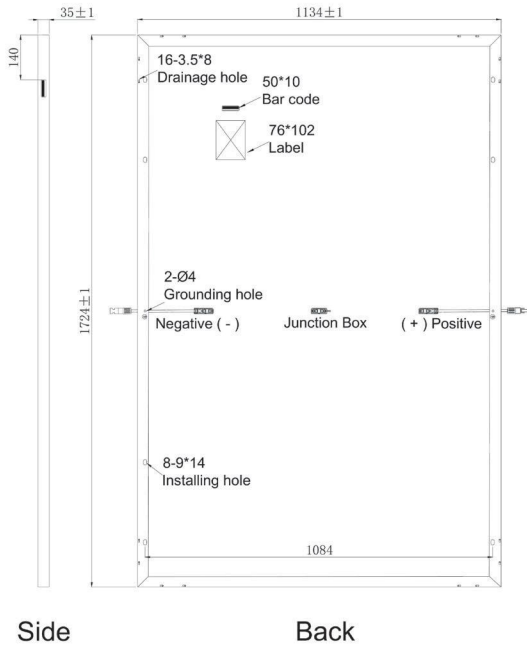
Efficiency can reach 21.28%. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.



POWER TOLERANCE

Power positive tolerance: 0~+3%

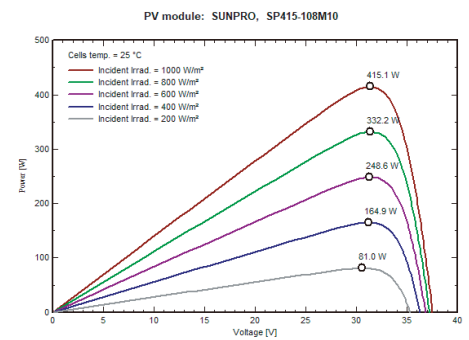
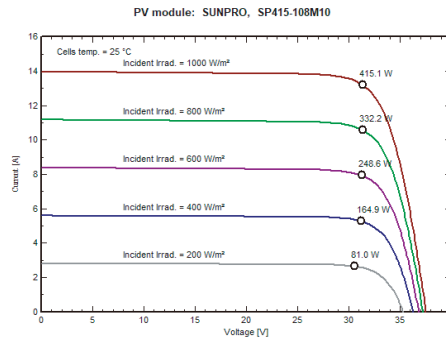
ENGINEERING DRAWING



Mechanical Data

Dimensions	1724x1134x35mm
Weight	21.5 kg
Glass	3.2mm ultra clear embossed tempered coated glass
Output cables	4mm ² , symmetrical lengths 1100mm
Connectors	MC4 compatible IP68
Cell type	Mono-Crystalline PERC, 182x91mm
Number of cells	108 cells (Half-Cell)

V CHARACTERISTICS AT DIFFERENT IRRADIATION



Electrical parameters at NMOT test conditions

(Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s)

Max power(Pmax)	305
Max power voltage(Vmp)	28.80
Max power current(Imp)	10.58
Open circuit voltage(Voc)	34.80
Short circuit current(Isc)	11.20

Electrical parameters at standard test conditions

(STC:AM=1.5, 1000W/m², Cells Temperature 25°C)

Max power(Pmax)	410
Max power voltage(Vmp)	31.25
Max power current(Imp)	13.12
Open circuit voltage(Voc)	37.33
Short circuit current(Isc)	13.90
Module Efficiency(%)	20.97
Max system voltage	DC 1500V(TÜV,UL) / 1000V(CUL)
Maximum Series Fuse Rating	25A

Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.048%/°C
Temp.Coeff.of Voc(TK Voc)	-0.27%/°C
Temp.Coeff.of Pmax(TK Pmax)	-0.34%/°C
Operating temperature	-40~+85°C
Normal operating cell temperature	44±2°C

Packing Configuration

Container	40'HQ
Pieces per pallet	62
Pallets per container	13
Pieces per container	806

Tests, Certifications and Warranties

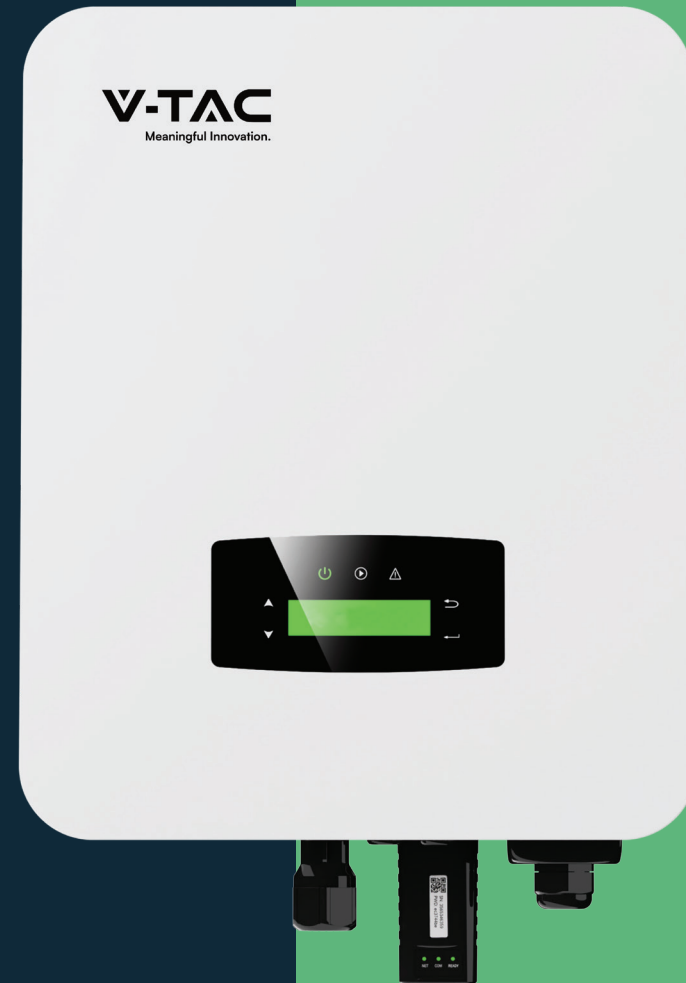
Standard tests	IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE, UL, CEC, INMETRO, WEEE
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	0~+3%
Junction box	IP 68
Warranties	12 years product warranty and 25 years 84.8% of power

V-TAC
Meaningful Innovation.

5kW

**Single Phase
Hybrid Solar Inverter**

05 YEAR
WARRANTY



V-TAC.EU | VTACEXPORTS.COM

CE **RoHS**

LISTING DETAILS

Model No:	VT-6607105
SKU Code:	11819
EAN Code:	380017020286

PV INPUT

Max. Input Power(kW)	7.5
Max. PV Voltage(V)	550
MPPT Range(V)	80-500
full MPPT Range(V)	150-500
Normal Voltage(V)	360
Startup Voltage(V)	100
Max. Input Current(A)	18.5*2
Max. Short Current(A)	26*2
No. of MPP Tracker	2
No. of PV String	2

BATTERY PORT

Battery Type	Li-ion / Lead-acid etc.
Battery Voltage Range(V)	40-60
Battery Normal Voltage(V)	51.2
Max. Charge/Discharge Current(A)	80
Max. Charge/Discharge Power(kW)	4.8

EFFICIENCY

CEC Efficiency(%)	97
Max. Efficiency(%)	97.6
PV to Bat. Efficiency(%)	98.1
Bat. between AC Efficiency(%)	96.8

AC LOAD OUTPUT

Nominal AC Voltage L-N(V)	220 / 230
Nominal AC Frequency(Hz)	50 / 60
Nominal AC Current(A)	22.8/21.8
Max Continuous Current(A)	23.0
Max Continuous Power(kVA)	5.0
Max Peak Current(A)(10min)	34.1/32.7
Max Peak Power(kVA)(10min)	7.5
Switching Time(s)	Seamless
Voltage THD(%)	< 3

AC GRID

Nominal Grid Voltage(V)	220 / 230
Nominal Grid Frequency(Hz)	50 / 60
Nominal Grid Current(A)	22.8/21.8
Max Continuous Current(A)	23.0
Max Continuous Power(kVA)	5.0
Current THD(%)	< 3
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)

GENERAL DATA

Dimensions (L x W x H, mm)	513 x 370 x 192
Weight (kg)	17
Topology	Transformerless
Cooling	Intelligent Fan
Relatively Humidity	0 - 100 %
Operating Temperature Range (°C)	- 25 to 60
Operating Altitude (m)	< 4000
Noise Emission (dB)	< 25
Standby Consumption (W)	< 10
Mounting	Wall Bracket
Communication with RSD	SUNSPEC
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G
Certification & Approvals	NRS97, G98/G99, N50549-1, C10/C11, AS 4777, DE-AR-N4105, VDE0126, IEC62040, IEC62109-1, IEC62109-2IEC 60068, UL1741, EN62109
EMC	EN61000-6-2, EN61000-6-3

PROTECTION

PV Reverse Polarity Protection	Yes
Over Current/Voltage Protection	Yes
Anti-Islanding Protection	Yes
AC Short Circuit Protection	Yes
Residual Current Detection	Yes
Ground Fault Monitoring	Yes
Insulation Resister Detection	Yes
PV Arc Detection	Yes
Enclosure Protect Level	IP65 / NEMA4X

V-TAC

Meaningful Innovation.

5.12kWh Rack Mounting Lithium Battery

05 YEAR
WARRANTY

**HYBRID ENERGY
STORAGE SYSTEM**



V-TAC.EU

|

VTACEXPORTS.COM

TUV NORD

CE RoHS

LISTING DETAILS

Model No: **VT48100E-P2**

SKU Code: **11377**

EAN Code: **3800157689359**

MASTER BOX PACKAGING

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

Net Weight : **Approx. 41kg**

Product Size : **445*400*130 mm**

GENERAL DATA

Nominal Capacity **100Ah@0.2C, 25°C**

Nominal Voltage **51.2V**

Nominal Energy **5.12kWh@0.2C, 25°C**

Charge Voltage **56.8V**

Standard Charge Current **20A@25°C**

Max Continuous Charge Current **100A@25 °C**

Standard Discharge Current **20A@25°C**

Max Continuous Discharge Current **100A@25 °C**

Discharge Cut-off Voltage **42.0V**

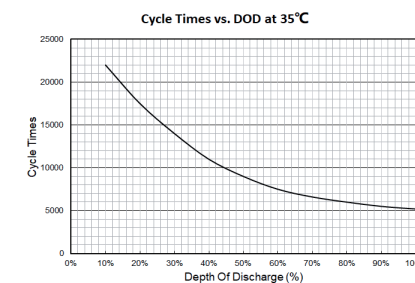
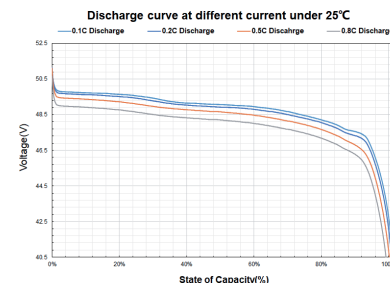
Operating Temperature **Charge : 0~+60°C**

Discharge : -20~+60°C

Allowed Humidity Range **≤95% RH**

IP **IP20**

TECHNICAL CURVES



LiFePO4
CATHODE MATERIAL



Self-designed BMS
International design
certification



LifePO4 cells,
ensuring safety of
the battery



Long cyclic life-6000
cycle (80% DOD)



High rate
charge/discharge
current @ 100A



Modular design
Easy expandability

Compatibility list of all V-TAC batteries

* Battery SKU-11539 is compatible only with DEYE inverters (SKU-11529; 11537; 11542; 11543; 11547).

The communication is RS485 and CAN protocols.

* Maximum allowed number of batteries, connected to one inverter ≤ 4 pcs.

In case your inverter is of different brand, please contact us to check for compatibility.



Item	Manufacturer	Inverter Type	Communication	Application	Key Features		Firmware Ver	Installation	Amend	
					Activation	Force Charge			Done	Testing
1	Vestwoods	VW 3-8KSL-EU SERIES, VW 5~12KSL-NA SERIES	CAN	On/Off Grid	Yes	Yes		Wall mounting	✓	
2	Megarevo	RKL1 SERIES, RKLNA SERIES	CAN	On/Off Grid	Yes	Yes	ARM V1.00.31 DSP V1.01.26	Wall mounting	✓	
3	Invt	BD3KTL, BD5KTL, BD3KTL-HS, BD5KTL- HS	CAN	On/Off Grid	Yes	Yes		Wall mounting	✓	
4	Deye(Sunsynk)	SUN-5K-SG01/03LP1-EU, SUN-8K-SG03LP1-EU	CAN	On/Off Grid	Yes	Yes		Wall mounting	✓	
5	Growatt	SPH3000-6000	CAN	On/Off Grid	No	Yes		Wall mounting	✓	
		SPF5000 ES	RS485	On/Off Grid	No	Yes		Wall mounting	✓	
6	Victron	Multiplus II. 48/3000/35-32 Multiplus II 48/5000/70-50 Multiplus II 48/8000/110-100	CAN	On/Off Grid	Yes	Yes		Wall mounting	✓	
7	SRNE	HF2420/30S60-100, HF2420/30U60- 100, HF4830~50S60-145 SERIES, HF4825~35U60-145 SERIES	RS485	Off Grid	Yes	Yes		Wall mounting	✓	
8	phocos	Any-Grid PSW-H (3 kW/5 kW/6.5kW/8 kW)	RS485	On/Off Grid	Yes	Yes	V1.00	Wall mounting	✓	
9	SMA	Sunny Island SERIES 3.0M/4.4M/6.0H/8.0H	CAN	On/Off Grid				Wall mounting	✓	
10	Goodwe	3kW-5kW ES/EM SERIES (Single Phase)		On Grid	Yes	Yes		Wall mounting	✓	
11	Senergy	SE4K6~6KHB-60 SERIES, SE4K6~6KHB-120 SERIES	CAN	On/Off Grid	Yes	No		Wall mounting	✓	
12	Growcol	Hyper SERIES	CAN	On/Off Grid	Yes	Yes		Wall mounting	✓	
13	Sunpro	3kW~12kW SERIES	CAN	On/Off Grid	Yes	Yes		Wall mounting	✓	
14	Lux power	LXP 3K Hybrid, LXP 4K Hybrid, LXP 5K Hybrid	CAN	On Grid	Yes	Yes	AA1.0	Wall mounting	✓	
15	LIVOLTEK	GF1-3K/5K48S1	CAN	Off Grid	Yes	Yes		Wall mounting	✓	
16	Voltronic	InfiniSolar 10K	RS485(9600)	On/Off Grid	Yes	Yes	V1.00	Wall mounting	✓	
17	Studer Innotec	750W XTS-48	CAN	On/Off Grid	Yes	Yes	R652	Wall mounting	✓	

Item	Manufacturer	Inverter Type	Communication	Application	Installation	Firmware Ver	Testing	Compatible	Multiple Connect (≤4PCS)
1	MUST		CAN	On/Off Grid	Wall mounting			✓	✓
2	SMA		CAN	On/Off Grid	Wall mounting			✓	✓
3	Deye	SUN-6k-SG03LP1-EU	CAN	On/Off Grid	Wall mounting			✓	✓
4	INVT	6kW	CAN	On/Off Grid	Wall mounting			✓	✓
5	MEGAREVO		CAN	On/Off Grid	Wall mounting			✓	✓
6	Victron		CAN	On/Off Grid	Wall mounting			✓	✓
7	Afore	Hybrid 6kW	CAN	On/Off Grid	Wall mounting			✓	✓
8	SRNE		RS485	On/Off Grid	Wall mounting			✓	✓
9	Growatt	SPF5000 ES	RS485	On/Off Grid	Wall mounting			✓	✓
10	Voltronic Power	WP-2P(LV) 6KW	RS485	On/Off Grid	Wall mounting			✓	✓

Item	Manufacturer	Inverter Type	Communication	Application	Key Features		Installation	Amend	
					Activation	Force Charge		Done	Testing
1	Sacolor	5KW, 10KW, 12KW	RS485	Off Grid	Yes	Yes	Wall mounting	✓	
2	Growatt	SPF 3500ES SPF5000ES	RS485	Off Grid	Yes	Yes	Wall mounting	✓	
		SPH-3000TL-US SPH-3600TL-US SPH-4000TL-US SPH-4600TL-US SPH-5000TL-US SPH-6000TL-US	CAN	Hybrid grid					
3	Sofar	HYD-3000-EP HYD-3680-EP HYD-4000-EP HYD- 4600-EP HYD-5000-EP HYD-5500-EP HYD-6000- EP	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
4	Lux power	LXP-4K HB LXP -5K HB LXP-6K HB	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
5	Goodwe	ES/EM/S-BP/BP Series	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
6	Deye	SUN-3.6-5K-SG03LP1-EU SUN-5-8K-SG01LP1-US	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
7	Solis	RHI-(3-6)K-48ES S5-EHIP(3-6)K-L Seres	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
8	Sorotech	REVO-II 3-5K Series	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
9	SMA	SUNNY ISLAND 3.0M / 4.4M / 6.0H / 8.0H	CAN	Off Grid	Yes	Yes	Wall mounting	✓	
10	Victron	MultiPlus-II-GX 3KVA-5KVA-8KVA-15KVA	CAN	Off Grid	Yes	Yes	Wall mounting	✓	
11	Sol-ark	Sol-ark 10KW/12KW	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
12	Megarevo	R(3K-6K)L1 R(6K-12K)H1NA	CAN	Hybrid grid	Yes	Yes	Wall mounting	✓	
13	Voltronic	3kW~12kW SERIES	RS485	Off Grid	Yes	Yes	Wall mounting	✓	