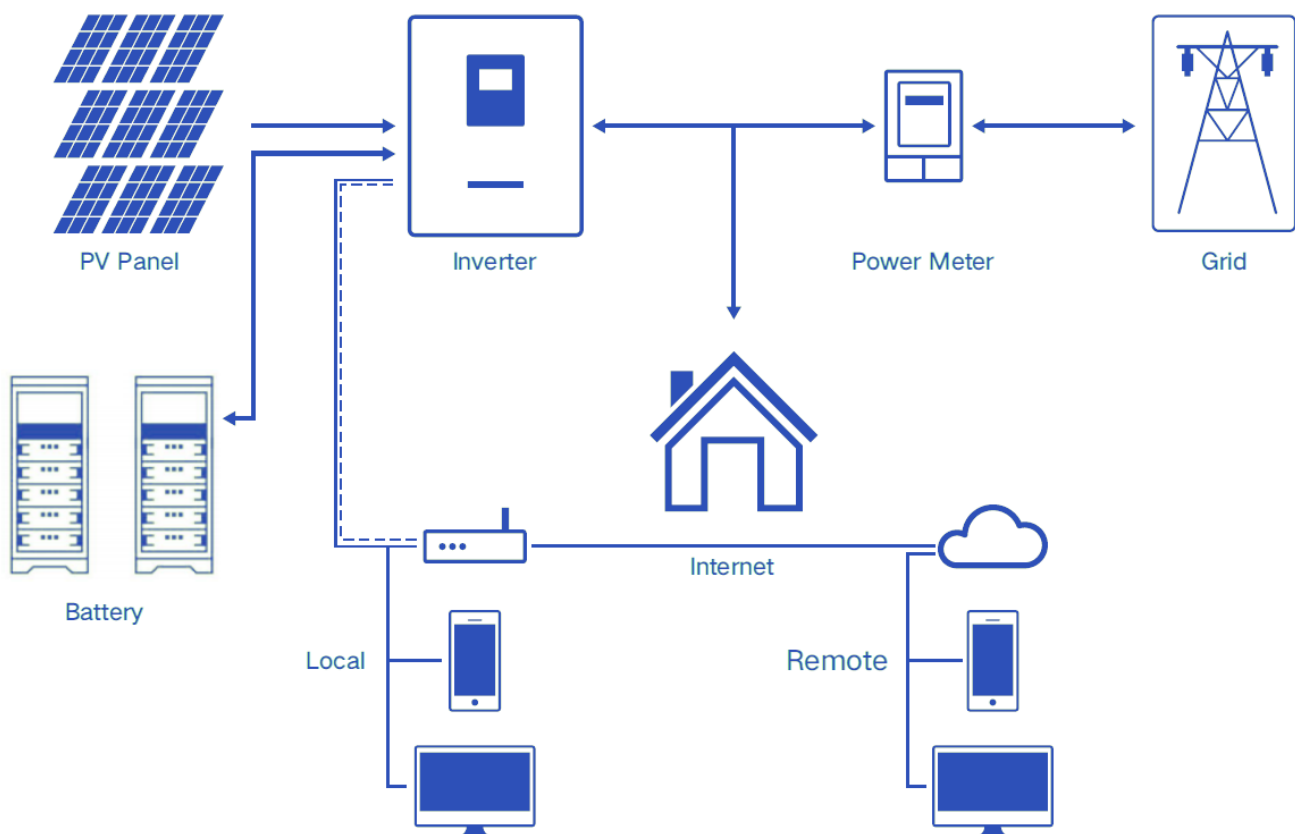


PRODUCT FEATURES

- The expected design life is up to 15+ years
- 10 years warranty
- Greater depth of discharge (DOD 90%) compared to Lead-Acid/AGM/GEL battery(DOD 50%)
- Single battery module capacity of 5.1kWh
- Working temperatures of between -20°C to 55°C (Charging 0~50°C; discharging -20~55°C)
- More stable and safer LFP internal battery cells, allowing an increase in the combustion temperature of 600°C compared to 300°C relative to NMC and LCO
- Battery management system (BMS) automatically manages charge/discharge state and balance current/voltage of each cell. BMS enables protection functions including over-discharge, over-charge, over-current protection and high/low temperature protection.
- 19 inch standard module battery design, easy installation, DIY friendly and expansion up to 16 modules that makes the total capacity to 81kwh in a single battery group.
- Natural cooling allows the battery to achieve the highest energy efficiency and no fan noise

SYSTEM ARCHITECTURE



TECHNICAL SPECIFICATIONS

Model	VT5000ES48
Nominal DC Voltage	51.2V
Operation Voltage Range	41.5V-51V
Nominal Capacity	5.1kWh / 100Ah
Continuous Charge / Discharge Current	50A
Max Charge / Discharge Current	100A
Peak Discharge Current	150A(10S)
Peak Charge Current	10A(5S)
Charge/Discharge Cycles (80% Remaining Capacity)	6000 @80% DoD @25°C
Operating Temperature Range	Charge: 0° to 50°C / Discharge -20° to 55°C
Operating Humidity (Non condensating)	<95%
Altitude	Below 4000m
Battery Dimensions	600mm D x 460mm W x 160mm H
Battery Mounting Options	Standard 19" Rack Mounting / Horizontal or Vertical
Module Weight	5 kg
BMS Over-Volt cut off	58.4V
BMS Under-Volt cut off	43.2V
BMS Over-Temp cut off	65°C
BMS Under-Temp Cut off (Discharge)	-20°C
BMS Under-Temp cut off (Charge)	0°C
Self Discharge	3% / 6R
Lithium Composition	Lithium Ferro Phosphate (LiFePO4 or LFP)
Communication	CAN RS485 / 5681
IP Rating	IP20
Round Trip Efficiency	>95.6%
Expected Life @25°C	Over 15 years design life when used as per recommended
Cooling	Natural cooling
Parallel Stacking(max. in 1 battery group)	1
Serial Stacking	Not designed for serial connection
Certifications	IEC:62619:2017, UN38.3, EMC
Shut Down SoC	Configurable, 20% - 100%
Continuous Charge Voltage (Per Warranty)	51V
Float Voltage	51V
100% recharge	7 to 14 days to keep External SoC counter accurate
Cable Size	Refer to cable sizing standard
Warranty	10 year warranty Refer Warranty document for warranty duration, installation, usage and maintenance requirements
Note	The specification is subject to change at any time without notice

