



VSOLE
TECHNOLOGY BEYOND IMAGINATION

India's 1st Solar PV Inverter with Latest Standards & Modern Technology



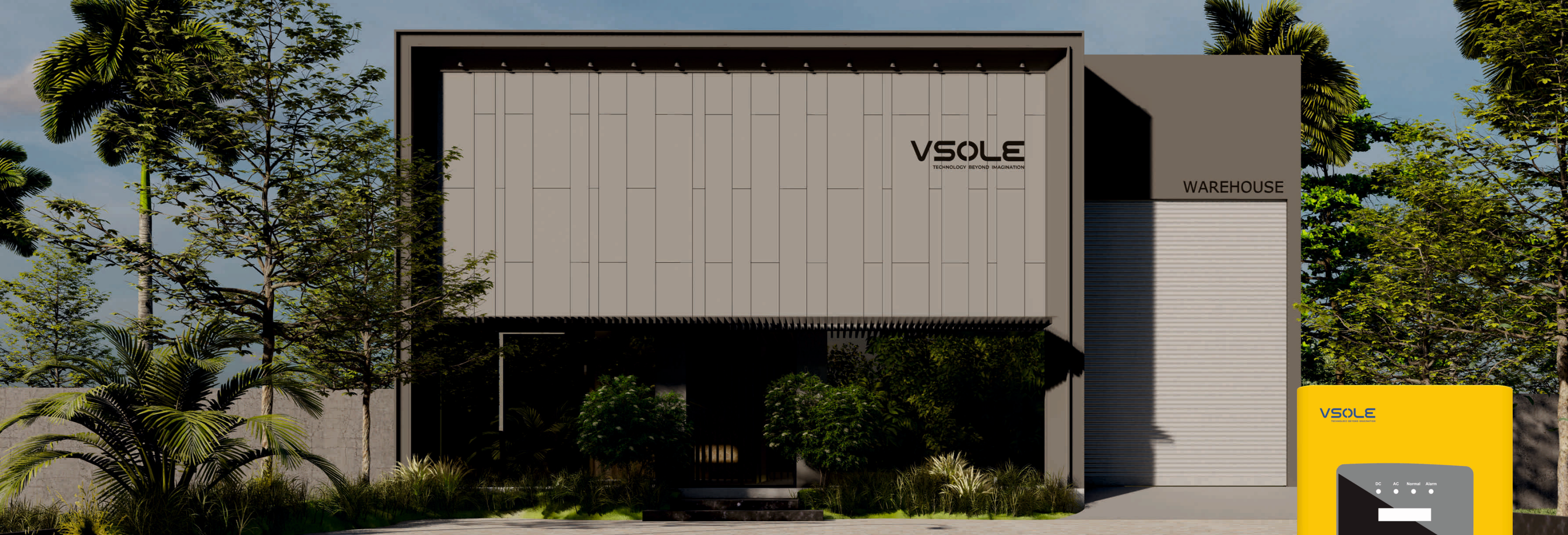
Redefining the **Solar World**
with Sustainable & Reliable
Solar Inverter.



#startupindia



**AatmaNirbhar
Bharat Abhiyan**



OUR STORY

Vsole is a start-up company formed by an experienced bunch of skilled professionals. Our Team has come together to build top notch Solar based products to meet the needs of current industry. We have successfully developed Solar grid-tie inverter & Hybrid Inverters for Solar industry those are totally reliable, easy to care, user friendly with unbreakable sustainability. We have established the corporate office in Surat, Gujarat popularly known as Solar-city of INDIA and established State of Art facility in the state of GUJARAT which is the hub of Solar business in INDIA. Our Team has a total experience of more than **12 years** in the field of Solar Energy that put us in unique position to provide end-to-end customised solution to our user's satisfaction.

With a strong belief in **"Make in India"**, Vsole's mission is to bring India made solar inverters to promote pollution free climate all around the world.



OUR VISION

Our vision is to cement a place for ourselves by being the part of this solar energy drive to take India to a next level.



OUR MISSION

Our mission is to fill the gaps in Indian solar industry by providing the most reliable & carefree product at an affordable price with long product life.

WHY VSOLE

Below mentioned unique features makes our Inverter suitable for "EVERYONE"

Affordable

So more and more people could use them and get clean energy.

Reliable

Our products are made from high grade components to work tirelessly, also they are supported by longer & unique warranty terms.

Sustainable

We understand Inverters upto chip & component level, which stand us apart from the rest in the solar industry.

Dependable

We are driven by a simple idea: **"SOLAR IS FOR EVERYONE"**. The future of energy is in Solar energy industry, we plan to fulfill the demands of industry by providing best experience through our product & Services to our distributors, dealers, EPCs players and end users. Our complete local presence across India makes us more **dependable & trustable**.



OUR USP



Cost effective & compact design.



24 hours remote service support.



Easy approach & reachability for EPC companies & end users in India.

OUR PRODUCTS



Grid Tie Inverter Single Phase



Grid Tie Inverter Three Phase



Bi Directional Hybrid Inverter

KEY BENEFITS

- Compact & light design for easy installation
- Wide input range
- Natural cooling
- Mobile app



GRID TIE INVERTER - SINGLE PHASE

VS (101S - 602S) 1.0 KW-6.0 KW

- H - bridge & T-type three-level topology & enhanced SPWM (Space Pulse Width Modulation).
- Max. DC input current per string; compatible upto 550WP solar panel.
- DC overloading upto 10%.
- High DC/AC ratio for more yields
- Special external colour with Epoxy Novolac coating for better Heat Management.
- Compact and light weight design for an easy Installation
- Wide Input Range; Low Voltage start-up of 80V.
- Multiple MPPT Design with IDA Technology (Intelligent Disturbance Algorithm).
- Inbuilt surge protections at both AC and DC side.
- Fan-less natural cooling models.
- RS485, remote monitoring (Wi-Fi/GPRS)
- User friendly Web and Mobile App Monitoring
- Zero export enabled models (External CT required).



GRID TIE INVERTER - SINGLE PHASE

CAPACITY (KW)	1	2	3	3.4	3.6	4.0	4.2	4.7	5	5.4	6
MODEL NUMBER	VS-101S	VS-201S	VS-301S	VS-341S	VS-361S	VS-422S	VS-422S	VS-471S	VS-502S	VS-542S	VS-602S
INPUT (DC)											
Max.DC input power (KW)	1.1	2.2	3.3	3.7	3.9	4.4	4.6	5.1	5.5	5.9	6.6
Max. DC I/P (Vdc)	550Vdc										
Max. MPPT I/P Current (A)	13A										
MPPT Short Circuit Current (A)	20A										
MPPT Tracking Voltage (Vdc)	70-500V						80-500V				
Min. Start Voltage (V)	80Vdc										
Number of MPPT Tracker	1						2				
Strings per MPPT Tracker	1										
OUTPUT (AC)											
Rated output power (KW)	1	2	3	3.4	3.6	4.0	4.2	4.7	5	5.4	6
Rated Grid Voltage (V) / Range	230V (140-285V)						230V (170 - 290V)				
Rated Grid freq. (Hz) / Range	50Hz (± 5%)										
Rated output current AC (A)	4.7	9.4	14.1	15.5	18.8	18.8	19.8	20.5	23.5	23.5	28.2
AC Connection	P + N + PE										
THDI (%)	<3%										
Output Power factor	0.8 leading to 0.8 lagging										
EFFICIENCY											
Max. conversion Efficiency (%)	97.3				97.5						
Max. Euro Efficiency (%)	97.1				97.3						
MPPT Efficiency (%)	>99										
PROTECTION											
Anti-Islanding Protection	YES										
DC Reverse Polarity Protection	YES										
Insulation Resistance Protection	YES										
Ground Fault Protection	YES										
Output Over Current Protection	YES										
Output Short circuit Protection	YES										
Output Over Voltage Protection	YES										
DC Isolator Switch	YES										
Surge Protection	DC: Type III / AC: Type III										
GENERAL DATA											
Dimensions (W*H*D) mm	280*272.5*184					330*323*190					
Weight (Kg)	4.8					7.5					
Topology	Transformerless										
Noise Emission (dB)	<25dB										
Display	LED with LCD Display										
Cooling Method	Natural Cooling										
Operating ambient Temperature	(-25°C ~ +65°C)										
Operating Humidity	0% - 100%										
Max. Operating Altitude (m)	2000 (>2000 Derating)										
Ingress Protection	IP65										
Night Consumption (w)	<1										
Standard Warranty	8 Years (extendable upto 10 Year)										
CONNECTION TYPE											
DC connectors	MC-4										
Ingress AC plug	IP65 rated plug										
Monitoring System	WiFi / GPRS / RS 485/ ETHERNET LAN / Local Monitoring										

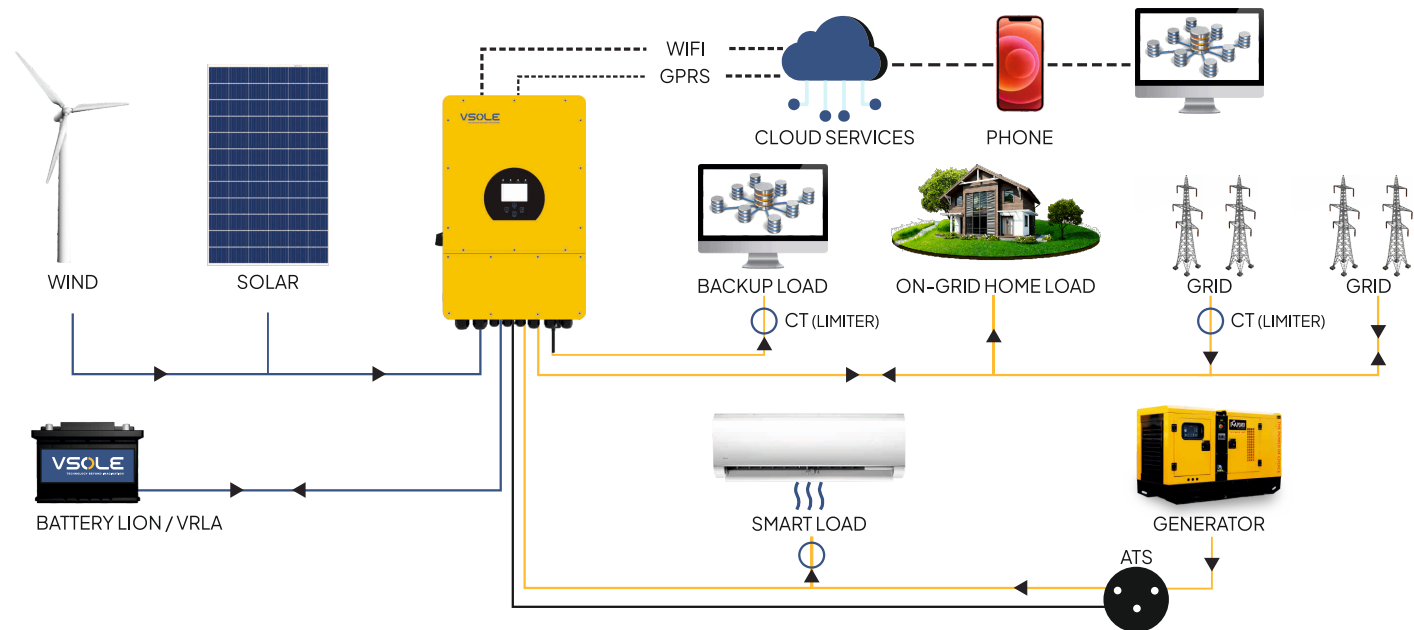
BI-DIRECTIONAL HYBRID INVERTER
VS (03H-012H) 3.0KW-12.0KW

- All in 1- Off Grid / On Grid & Hybrid Bi-Directional solution
- Automatic Superfast switching time (Changeover Time) 4ms. It can be used as UPS
- Battery Management System (BMS) to protect & enhance the battery life (Li-ion/Lead Acid/LiFP04)
- 100% unbalanced output, each phase; Max. output up to 50% rated power (Three Phase)
- Colourful touch LCD display with ease of operation & maintenance.
- Ideal solution for BLACK-OUT & BROWN-OUTS with GRID Exports with & without Battery.
- Programmable supply priority for PV, Battery & Grid.
- Inbuilt Zero Export / Reverse Power Limit to grid.
- Grid Peak Compensation Mode - It can reduce / Limit Maximum Demand (save your penalties)
- Intelligent SMART LOAD function for AC, water heater, Micro & Grid tie inverter.
- DC couple and AC couple to retrofit existing solar system
- Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current upto 240A
- 48V low voltage battery, transformer isolation design
- 6 times period for battery charging / discharging
- V/f drop control.
- Supports using diesel generator to charge the battery directly. ensuring system energy supply 24*7Hrs
- Max. Conversion efficiency of 97.6%; Max. battery charge efficiency of 95.5%
- Support storing energy from diesel generator.



BI-DIRECTIONAL HYBRID INVERTER

	Single Phase						Three Phase					
CAPACITY (KW)	3KW 24V	3KW 48V	3.6KW 48V	5KW 48V	6KW 48V	8KW 48V	5KW 48V	6KW 48V	8KW 48V	10KW 48V	12KW 48V	
MODEL NUMBER	VS-324S	VS-348S	VS-3648S	VS-548S	VS-648S	VS-848S	VS-548T	VS-648T	VS-848T	VS-1048T	VS-1248T	
BATTERY INPUT DATA												
Battery Type	Lead-acid or Li-Ion						Lead-acid or Li-Ion					
Battery Voltage Range (V)	20~30	40~60					40~60					
Max. Charging Current (A)	140	70	90	120	135	190	120	150	190	210	240	
Max. Discharging Current (A)	140	70	90	120	135	190	120	150	190	210	240	
Charging Curve	3 Stages / Equalization						3 Stages / Equalization					
Charging Strategy for Li-IonBattery	Self-adaption to BMS						Self-adaption to BMS					
PV STRING INPUT DATA												
Max. DC Input Power (W)	3900	3900	4680	6500	7800	10400	6500	7800	10400	13000	15600	
Rated PV Input Voltage (V)	370 (125~500)						550 (160~800)					
Start-up Voltage M	125						160					
MPPT Voltage Range (V)	150~425						200~650					
Full Load DC Voltage Range (V)	300~425						350~650					
PV Input Current (A)	13	13-13				26	13+13			26+13		
Max. PV ISC (A)	17	17-17				34	17+17			34+17		
Number of MPPT/Strings per MPPT	1/1	2/1+1				2/2+2	2/1+1			2/2+1		
AC OUTPUT DATA												
Rated AC Output and UPS Power (W)	3000	3600	4000	5000	6000	8000	5000	6000	8000	10000	12000	
Max. AC Output Power (W)	3300	3690	4400	5500	6600	8800	5500	6600	8800	11000	13200	
AC Output Rated Current (A)	13.6	16.4	18.2	22.7	27.3	36	7.6	9.1	12.1	15.2	18.2	
Max. AC Current (A)	15	18	20	25	30	40	11.4	13.6	18.2	22.7	27.3	
Max. Continuous AC Passthrough (A)	35					40	50	45				
Peak Power (off grid)	2 time of rated power, 10 S						2 time of rated power, 10 S					
Power Factor	0.8 leading to 0.8 lagging						0.8 leading to 0.8 lagging					
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)						50/60Hz; 3L/N/PE 220/380, 230/400Vac					
Grid Type	Single Phase						Three Phase					
DC injection current (mA)	THD<3% (Linear load<1.5%)						THD<3% (Linear load<1.5%)					
EFFICIENCY												
Max. Efficiency	97.60%											
Euro Efficiency	97%											
MPPT Efficiency	99.90%											
PROTECTION												
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection											
Output Over Voltage Protection	DC Type II/AC Type III											
GENERAL DATA												
Operating Temperature Range (°C)	-45~60°C, >45°C derating						-45~60°C, >45°C derating					
Cooling	Natural Cooling						Smart Cooling					
Noise (dB)	<30db						<45db					
Communication with BMS	RS485; CAN						RS485; CAN					
Weight (kg)	11.4	14					33.6					
Size (mm)	330W x 433H x 238D						422W x 699.3H x 279D					
Protection Degree	IP65						IP65					
Installation Style	Wall-mounted						Wall-mounted					



4 LEVEL SERVICE SUPPORT

Complaint Registration at Hotline Number
+91 95120 22766 or raise the ticket from
our website **www.vsolesolar.com**



Remote support if the problem can get
resolved over an online monitoring access
(Each inverter should have internet connectivity through
the provided RMS Dongle)



Field/Site Visit for problem found in
hardware or for those which cannot
resolved via remote monitoring



Replacement will be provided against the
faulty inverter **within working 72Hours**
from the date of Complaint Log.



OUR PRESENCE



PAN INDIA
SALES OFFICE
& SERVICE CENTERS

We have sales cum service centers in every 200 kms in
selected regions,the replacement can be provided
through the nearest center on the basis of nature of fault in
the inverter.



www.vsolesolar.com

VSOLE SOLAR ENERGY PVT. LTD.

 +91 7575 881414

 info@vsolesolar.com

 2, Anthem business park-1, Near Nayara Petrol Pump, Simada – Canal Road,
Kosmada, Surat- 395006, Gujarat, India

Toll Free: 1800 120 9697

    /vsolesolar