

Cosmic Micro Systems Pvt. Ltd.,

23, 2nd 'A' Cross, JC Nagar,
Mahalakshimpura Layout,
Bengaluru - 560086
Ph : 080 3202 6262
Mob : +91 98800 15550
Email : sales@cosmicups.net

THE
one ANSWER TO
ALL YOUR
SOLAR NEEDS


COSMIC[®]
www.cosmicenergy.in



REGIONAL OFFICE:

NEW DELHI

Flat No.601, 6th Floor,
Vishal Bhawan, 95,
Nehru Place,
New Delhi - 110019
M: 8527298890

TAMILNADU

No.34, A&B, East Chetty Street,
St Thomas Mount,
Chennai - 600016
M: 9840275766

GUJARAT

C-45, 1st Floor, Vishwas City 2,
RC Technical Institute Road Ghatlodia,
Ahmedabad - 380061
M: 9426516831

BIHAR

286 B, Saket Road
No.13C, Rajendranagar,
Patna - 800016
M: 9835152630

MAHARASHTRA

Flat No 36,4th Floor, Wing: A3,
Sukh Shanti Niketan CHS Ltd, LBS Marg,
Opp Vijay Sales, Ghat Kopar (W),
Mumbai - 400086
Ph: 022 - 25001087, M: 9029037603

TELANGANA

Mehar Manzil. H. No. 6-3-347/22/8
Behind Sai Baba Temple,
Dwarakapuri Colony,
Panjagutta, Hyderabad - 500082
M: 9848024547

KERALA

RR Building - No.48/651 F2, 2nd Floor,
South Keerthi Nagar Elamakara PO,
Kochi - 682026
M: 9447033724

JHARKHAND

Sukriti Near Lala Lajpath Rai
Senior Secondary School, Lajpat Nagar
Pundag, Ranchi - 834004 M: 9835152630

WEST BENGAL

Block - FB plot No.23, 613 Rajadanga
Main Road, Kolkata - 700107
033 - 24413050, 9831202198

ANDHRA PRADESH

Ground Floor, D No. 45/1/83, Spandana
Building, Santinagar, Padavalare
VU Centre, Eluru Road, Vijayavada - 520004
M: 9010116615

MADHYA PRADESH

Manish Raikwar No. 25, Prince Nagar,
Sector A, Shanwer Road, Indore - 452015
M: 9424010634

PUNE

Survey No. 32/14, Plot No. 9, Avadhoot
Complex B2, Ambegaon B-K.
Pune - 411046 M: 09766591787

HUBLI

No. 12 Hallikeri Building, Jayanagar,
Vidyanagar, Hubli - 580021
Ph: 0836-2277486 M: 9980566117

BRANCH OFFICE:

| | | | |
|-----------|------------|------------|----------------|
| MYSORE | MANIPAL | NAGAPUR | LUCKNOW |
| MANGALORE | COIMBATORE | INDORE | DEHRADUN |
| HUBLI | MADURAI | JAMSHEDPUR | CHANDIGARH |
| GULBARGA | TRICHY | JAIPUR | VISHAKHAPATNAM |
| BELGAUM | CALICUT | SILIGURI | VIJAYAWADA |



GRID-TIE INVERTER WITH BATTERY BACKUP



SGTU-B SERIES
1kw - 60kw
1ph & 3 ph OUTPUT

www.cosmicenergy.in

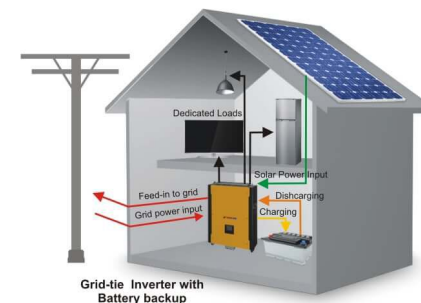
Grid-tie Inverter (Hybrid Inverter) with Battery backup

GRID-TIE INVERTER WITH BATTERY BACKUP

- Pure sine wave output
- Local Load Consumption and Export to grid
- Can be programmed supply priority for Solar, Battery or Grid
- User-adjustable charging current and voltage
- Programmable multiple operation modes Like On-Grid, Off-Grid and On-Grid with Battery Backup
- Parallel operation up to 6 units available for 3kw/4kw/5kw & 10kw Models (Optional)
- Communication - RS - 232, Modbus, SNMP & GPRS (Optional)

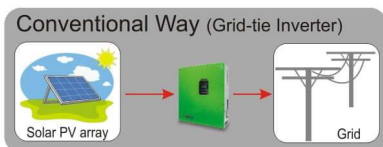


Cosmic Hybrid Inverter is a flexible and intelligent inverter which utilizes Solar power, AC Grid and Battery power source to supply continuous power to Load. It's a simple and smart solar power storage system with grid export facility for Customers to either store energy into a battery and can be use in night or use for self-consumption depending on demands. Priority for power source can be programmed and set up through smart software. During night time or power outages, it will automatically extract power from the battery source. In this way, it will reduce dependence on the Grid power.

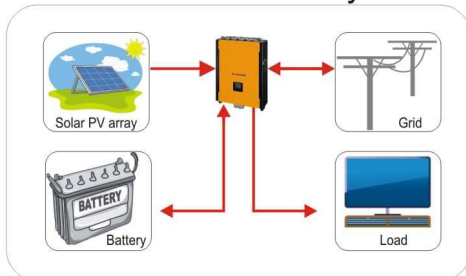


Exporting is not only choice

In comparison with conventional Grid-tie inverter, Hybrid Inverter is able to export power to the grid & also store solar power to the battery for future usage and directly power to the loads in Off grid mode during grid power failure.

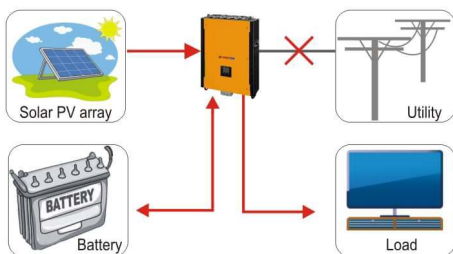


Innovative Way



Power backup when AC Grid failed

Hybrid Inverter can work as an Off-grid inverter to provide continuous power even without Grid by using Solar & Battery power. It's a perfect power solution for remote regions.



| Capacity | 1KW | 2KW | 3KW | 4KW | 5KW | 10KW |
|---------------------------------------|---|-----------------|-----------------|-----------------|-----------------|-------------------------------|
| Model No | SGTU - 101B | SGTU - 102B | SGTU - 103B-SM | SGTU - 104B | SGTU - 105B | SGTU - 103B |
| RATED OUTPUT POWER | 1000 W | 2000 W | 3000W | 4000W | 5000W | 10000 W |
| PV INPUT (DC) | | | | | | |
| Max. PV Power | 1000W | 2000W | 4000W | 4000W | 6000W | 14850 W |
| Max. PV Array Open Circuit Voltage | 145 VDC | 145 VDC | 145 VDC | 145 VDC | 145 VDC | 900 VDC |
| MPPT Range @ Operating Voltage | 15 VDC~115 VDC | 30 VDC~115 VDC | 60 VDC~115 VDC | 60 VDC~115 VDC | 60 VDC~115 VDC | 350 VDC ~ 850 VDC |
| Number of MPP Tracker | 1 | 1 | 1 | 1 | 2 | 2 |
| GRID-TIE OPERATION | | | | | | |
| GRID OUTPUT (AC) | | | | | | |
| Nominal Output Voltage | 220/230/240 VAC | | | | | 230 VAC (P-N) / 400 VAC (P-P) |
| Feed in Grid Voltage Range | 195.5~253 VAC or 184 ~ 264.5 VAC (Settable) | | | | | 184 - 265 VAC per phase |
| Feed in Grid Frequency Range | 47.5~57.3Hz | | | | | 47.5~57.3Hz |
| Nominal Output Current | 4.3A | 8.7A | 13A | 17.4A | 21.7A | 14.5 A per phase |
| Power Factor | >0.99 | | | | | >0.99 |
| Maximum Conversion Efficiency (DC/AC) | 90% | | | | | 96% |
| OFF-GRID, HYBRID OPERATION | | | | | | |
| GRID INPUT | | | | | | |
| Acceptable Input Voltage Range | 170 - 280 VAC | | | | | 170 - 280 VAC per phase |
| Nominal Frequency | 50 Hz (Auto sensing) | | | | | 50 Hz (Auto sensing) |
| Maximum AC input Current | 30A | | 40A | | | 40A |
| BATTERY MODE OUTPUT (AC) | | | | | | |
| Nominal Output Voltage | 220/230/240 VAC | | | | | 230 VAC (P-N) / 400 VAC (P-P) |
| Output Waveform | Pure Sine Wave | | | | | Pure Sine Wave |
| Efficiency (DC to AC) | 93% | | | | | 93% |
| BATTERY & CHARGER | | | | | | |
| Nominal DC Voltage | 12 VDC | 24 VDC | 48 VDC | 48 VDC | 48 VDC | 48 VDC |
| Maximum Charging Current | 140A | | | | 180A | 200A |
| Maximum Charging Current (from Grid) | 60A | | | | | User settable |
| Maximum Charging Current (from PV) | 80A | | | | 120A | User settable |
| GENERAL | | | | | | |
| Dimension, D X W X H (mm) | 100 x 300 x 440 | 100 x 300 x 440 | 120 x 295 x 468 | 120 x 295 x 468 | 190 x 295 x 483 | 167.2 x 500 x 622 |
| Net Weight (kgs) | 8 | | 11 | | 16 | 45 |
| INTERFACE | | | | | | |
| Parallel Function (Optional) | N/A | N/A | Yes | | | Yes |
| Communication (Optional) | USB or RS232/Dry-Contact/SNMP/GPRS/Modbus | | | | | |
| ENVIRONMENT | | | | | | |
| Humidity | 0 ~ 90% RH (No condensing) | | | | | |
| Operating Temperature | 0 to 50°C | | | | | -10 to 55°C |