

POLYCAB
SOLAR

SMARTER POWER FOR A CHANGING WORLD



SMART HYBRID SOLUTIONS

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India's Energy Challenge

Power Outages



Interrupted routines
Reduced comfort
Loss of productivity

Rising Electricity Bills



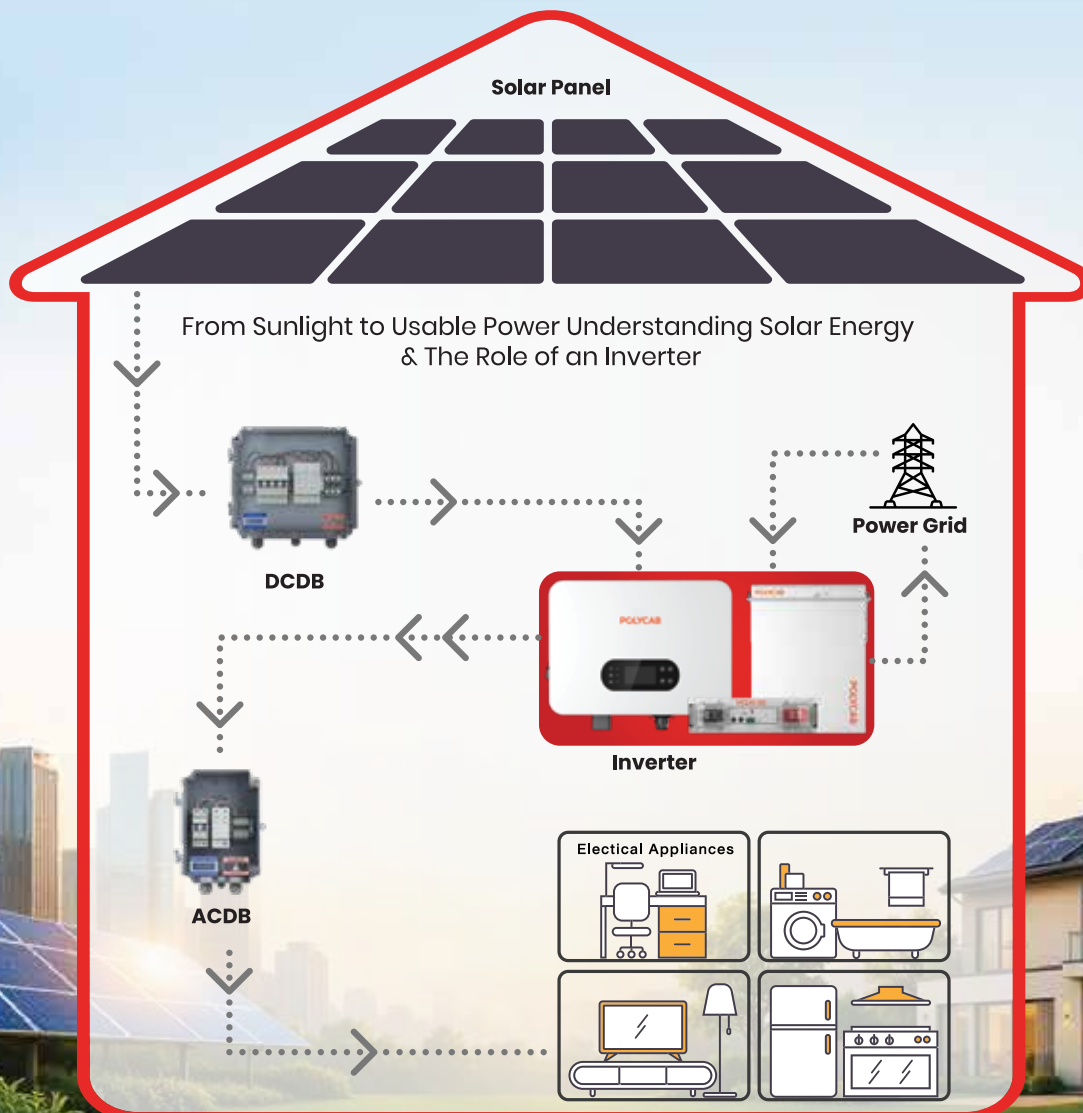
Higher monthly bills
Increased operating costs
Reduced savings

Energy freedom



Greater energy security
More control over power usage
Increased self-reliance

Working of Solar Plant



The Brain of a Solar Power System



Why is an Inverter Required?

Converts Solar Power into Usable Power
Makes solar electricity compatible with home appliances.

Powers Everyday Loads
Supports lights, fans, TVs, refrigerators and other appliances.

Optimizes Energy Usage
Helps maximize solar energy utilization.

Ensures Safe & Reliable Operation
Manages and regulates power flow efficiently.

Evolution of Inverters

From Backup Power to Intelligent Energy Management

Conventional Inverter

Backup during power outages

Power Sources

Grid, Battery

Limitations

- No solar integration
- Dependent on grid charging
- Limited energy management

On-Grid Solar Inverter

Convert solar energy into usable electricity

Power Sources

Solar Panels, Grid

Benefits

- Utilizes solar energy
- Reduces electricity bills

Limitations

- Limited or no energy storage
- Excess energy may remain unused

Hybrid Inverter

Intelligent management of multiple energy sources

Power Sources

Solar Panels, Battery, Grid

Benefits

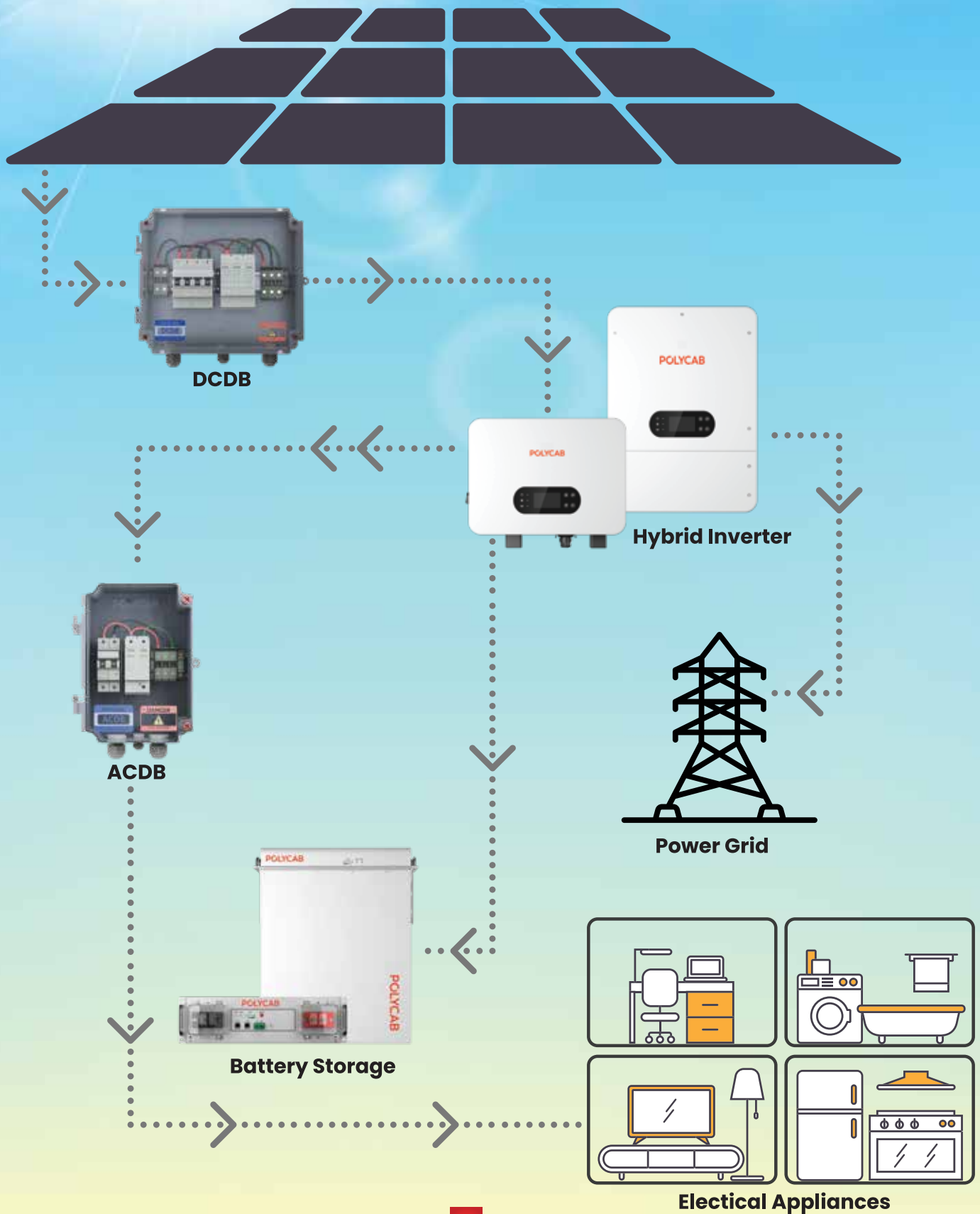
- Solar utilization
- Energy storage
- Backup power
- Smart energy management

One System. Total Energy Control.

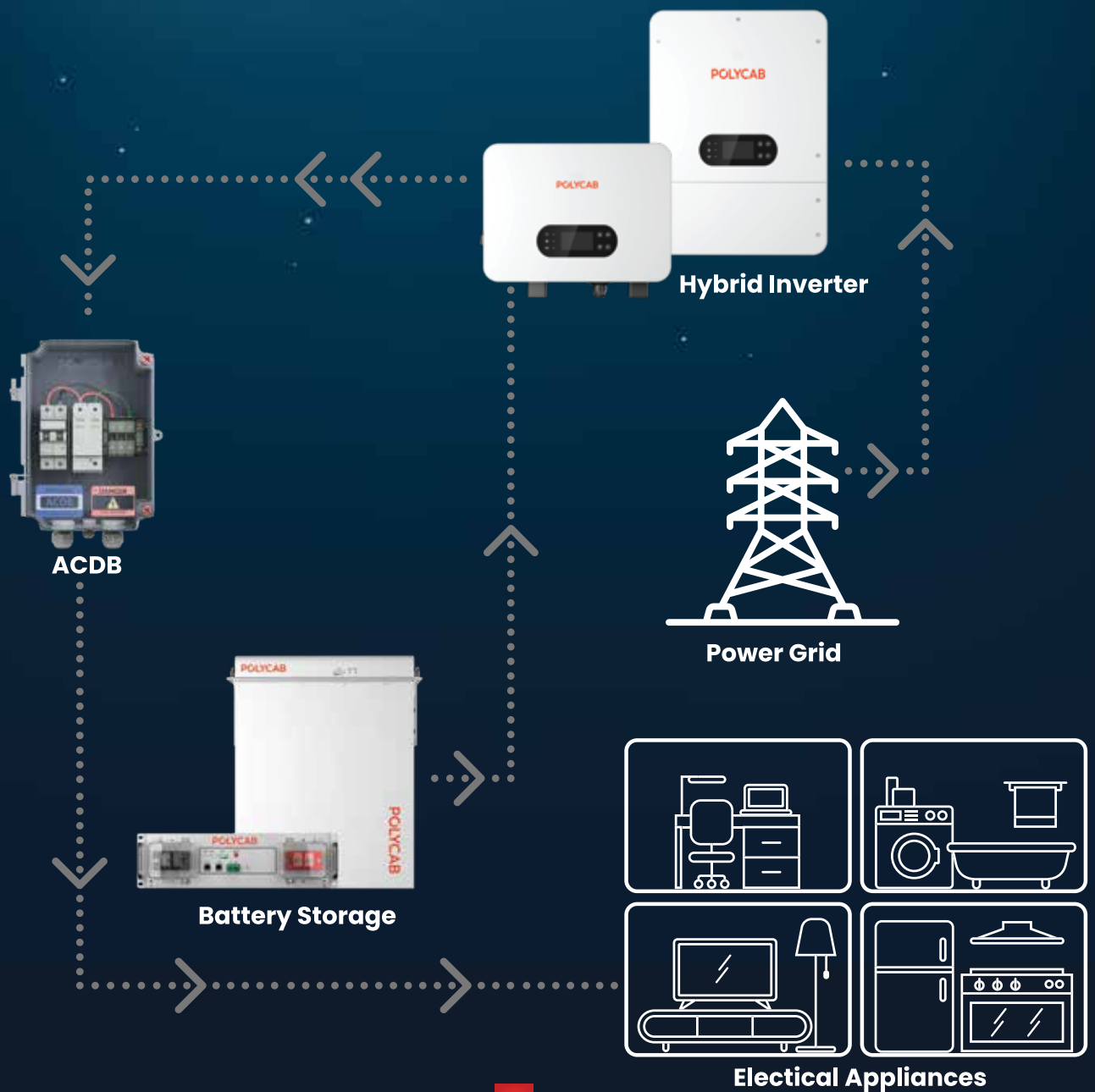
Manage solar, battery, and grid power seamlessly with uninterrupted energy. That's a Hybrid Inverter.



How a Hybrid Inverter Works at Day



How a Hybrid Inverter Works at Night



Why Add a Battery?

Store Today's Solar Energy for Tomorrow's Needs

A battery enables excess solar energy generated during the day to be stored and used whenever required, helping maximize solar utilization and ensuring reliable backup power.

Benefits of Battery Backup

Reliable Power Backup

Keeps essential loads running during outages.

Lower Grid Dependence

Optimize energy costs by utilizing stored energy during peak tariff periods rather than drawing power from the grid.

Greater Energy Control

Optimize energy consumption by intelligently managing energy usage patterns.

Energy Available After Sunset

Harness Solar Energy stored in the Battery to provide reliable backup power whenever Solar Generation and Grid is unavailable.



Solar Generates. Battery Stores. Hybrid Inverter Controls.
Together, they create a smarter, more reliable, and energy-independent power solution.

Single Phase Hybrid Inverters

Single Phase – Single / Dual MPPT

Models:

- PHIS-3K0-ESUQ
- PHIS-3K6-ESUQ
- PHIS-5K0-ESUQ
- PHIS-6K0-ESUQ



Future-Ready Hybrid Inverters for Next-Generation PM Surya Ghar Rooftop Solar Systems

Leading Features



Flexible & Adaptable Applications

- 3-in-1 Port: Generator, Smart Loads & On-grid Inverter
- Micro-grid Operation with PV Inverter
- Supports On and Off-Grid Parallel Operation of up to 6 units



Superb Safety & Reliability

- AI-driven AFCI*5
- IP66 Ingress Protection



Smart Control & Monitoring

- Smart Load Control
- Seamless Switching to Backup <4ms



Higher Power Generation

- Max. 20A DC Input Current per String
- 200% PV Input Oversizing*

10
Years

Polycab Inverter +
Polycab Battery
(Combo)

5
Years

Polycab Inverter +
3rd-Party Battery



For more technical details,
scan the QR code

Three-Phase Hybrid Inverter

Three Phase – Two / Three / Four MPPT

Models:

- PHIT-5K-ETLV
- PHIT-8K-ETLV
- PHIT-10K-ETLV
- PHIT-15K-ETLV
- PHIT-20K-ETLV



Next Gen Hybrid Inverter for Commercial & Residential Projects

Leading Features



High Performance

- 20A per string & 200% PV oversizing & 2Pn Max. Input
- Dual independent battery inputs with 416A



Superb Safety & Reliability

- AI-driven AFCI optional
- Type II SPD on both DC&AC sides
- IP66 ingress protection



Smart Control & Monitoring

- Seamless switching < 4ms
- Generator compatibility and charge for battery



Flexible & Adaptable Applications

- Unbalanced output up to 150%
- Compatible with both Lithium and lead-acid batteries



Polycab Inverter +
Polycab Battery
(Combo)



Polycab Inverter +
3rd-Party Battery



For more technical details,
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Low Voltage Battery

5kWh | Low Voltage Battery

Model:

- PHLVB-5K-AG3



Leading Features



Flexible & Adaptable Applications

- Continuous Discharge Current of up to 150A
- Scalable up to 150kWh, 30 Units in Parallel



Superb Safety & Reliability

- Reliable LFP Technology with High Cycle Stability
- Long Life Cycle, >6000 Times (70% EOL)



Friendly & Thoughtful Design

- Compact and Lightweight Design
- Multiple Installation Methods Supported for Expansion



Smart Control

- Remote Diagnosis & Update Via Inverter
- Auto Reboot after Undervoltage

10
Years

Polycab Single Phase
Inverter +
Polycab Battery
(Combo)

8
Years

Polycab Three Phase
Inverter +
Polycab Battery
(Combo)



For more technical details,
scan the QR code

Applications



Why Choose Polycab?



Trusted Brand

Built on decades of trust, quality, and innovation, Polycab is one of India's leading electrical brands, serving millions of customers across the country.



Extensive Service Network

A strong service and support network ensures timely assistance and dependable after-sales support whenever required.



Quality Assurance

Engineered to stringent quality standards, Polycab hybrid solutions are designed for reliability, safety, and long-term performance.



Complete Energy Ecosystem

From wires and cables to switches, switchgear, solar solutions, and energy management systems, Polycab offers an integrated ecosystem designed to power modern lifestyles.

Certifications



POLYCAB

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Corporate Office

POLYCAB INDIA LIMITED

#29, The Ruby, 21st Floor, Senapati Bapat Marg, Tulsi Pipe Road,

Dadar (West), Mumbai - 400 028, Maharashtra (India)

Ph.: +91-22-2432 7070/4, 6735 1400

✉ solar@polycab.com

| ☎ 1800 267 0008

| 🌐 www.polycab.com

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