



POWER TO THE PEOPLE

ASTRA⁺
HOME SERIES

Imagine freedom from power cuts.
Imagine generating your own electricity, and
using less of the state's.
Imagine less money spent on bills, and more to
spend on everything else.
Imagine contributing less to pollution with a
superior environmentally-friendly solution.
That's the power of the Solar Revolution.
And that power belongs to the people.
It's all yours. To make, to take, and to take back.
That's empowerment in its truest sense. That's
POWER TO THE PEOPLE™

WHO ARE WE?

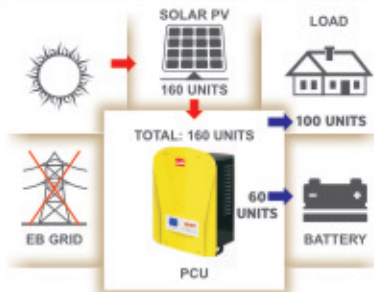
The BORG story began over a decade ago in NASA's Heliophysics Science Laboratory in Washington DC, USA. Extensive research and development created a revolutionary product line-up of alternative energy options based on smart on and off-grid technologies. Now headquartered in Houston, Texas, where our in-house design team and state-of-the-art assembly lines are based, we are committed to making alternative green power a way of life across the world. All our products are CE, ISO, UL and IEL certified, and tested by all international quality standards. With a presence in North America, Europe, South Africa, China and South East Asia, BORG is proud to unveil its Astra Home Series range, specially developed and customized to meet the needs of Indian households.

ASTRA - A POWER PLANT, NOT JUST A POWER BACK-UP

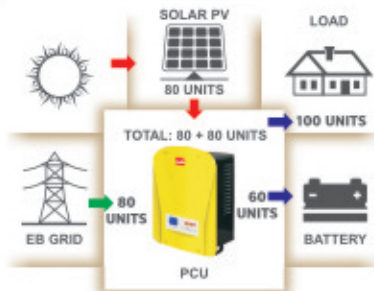
Unlike inverters and other power back-up systems, BORG products are Micro Solar Power Plants – meaning that they can be a primary source of electricity generation in your home, reducing your dependence on and consumption of state-supplied power. This means greater independence for you and your family – from erratic electricity supply, power cuts and excessive electricity bills. All power generated by your Astra Plant comes completely free of cost.



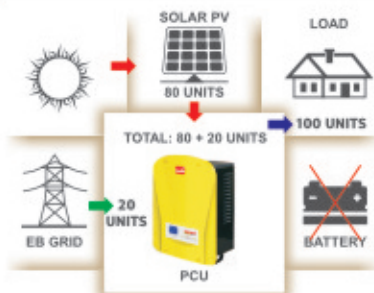
Case 1: PV energy more than connected load.
EB Grid power not required.
Battery not fully charged.



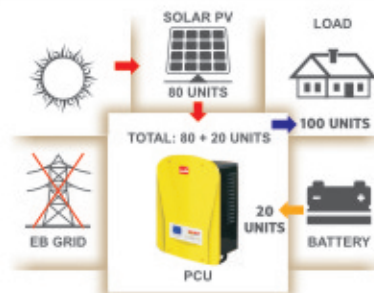
Case 2: PV energy less than connected load.
EB Grid power available.
Battery not fully charged.



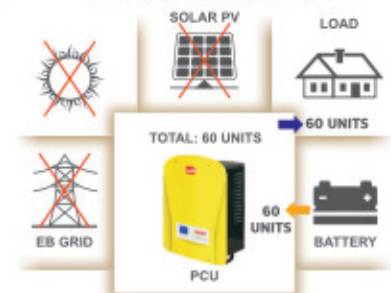
Case 3: PV energy less than connected load.
EB Grid power available.
Battery fully charged.



Case 4: PV energy less than connected load.
EB Grid power not available.
Battery charged.



Case 5: PV energy not available.
EB Grid power not available.
(Night time available. Battery charged.)
Works purely as inverter. Supply directly proportionate to battery charge.



Assumption: Energy Requirement - 100 Units

HOW DOES IT WORK?

Solar power is the conversion of sunlight into electrical energy, using either a direct method known as photovoltaics (PV) or indirectly using concentrated solar power. It is environmentally-friendly, easy to harness, and can be seamlessly incorporated into your regular power consumption using the BORG Astra Home Series. The only differences you will note are the increased reliability and the reduced bills.

BORG Astra power plants are intelligent smart grid systems that generate your own electricity using solar power. When the solar output power is greater than the required load power, the intelligent hybrid power controller will deliver the excess power to charge the battery. When the electricity generated is less than required, it will take only the differential excess power requirement from the grid. Thus, the system efficiently manages solar power, saving on energy bills, while contributing to a greener environment.

BORG Astra is an intelligent device that requires no monitoring, and has an online protection function, friendly alarm system and no-load auto shutdown.



WHAT DOES THIS MEAN FOR YOU?

- Independence: Generate your own electricity
- Cost-saving: The electricity you generate and use is free
- Reliability: Never experience a power cut
- Fuss-free: No need for an inverter. It can act as a power plant, stabilizer & inverter
- Green power: Solar energy is 100% environmentally friendly, clean and quiet
- Returns: An Astra plant is an investment, and you begin to reap returns immediately
- No hidden costs: There are no maintenance costs and installation is free
- Assurance: A 25 year warranty comes with your Astra unit
- Superior expertise: American research, development and technology



SPACE REQUIREMENTS AND EXPANSION

A BORG Astra unit can be used in apartments, independent houses and offices, and takes up 90 square feet per KW on the rooftop. Its weight is less than 90kg. Expansion options, should you wish to generate more electricity, are simple to install provided you have the required space.

INSTALLATION AND WARRANTY

Installation of your BORG Astra Power Plant is free. Our products come with an extendable 25 year warranty: 10 year product warranty, 12 years at 90% power output, 25 years at 80% power output, and an optional further 5 years AMC on the PCU.

BORG CARE

BORG Care Centre attends to all your needs as the owner of a BORG Astra Power Plant, from installation of the unit to ongoing monitoring of system performance, expansion and other engineering needs. We offer after-sale services across all districts, as well as an online assistance facility. We ensure that all service enquiries are addressed within 24 hours.

FAQS

Do I need an inverter if I have BORG Astra?

No, you don't need an inverter.

Can I incorporate my existing battery bank into BORG Astra?

Yes, you can incorporate your existing battery bank into BORG Astra.

What are the average savings I can expect in my electricity bill?

You can save upto 60% on your electricity bill when you use Astra Gold.

Can I avail a bank loan for this product? What about EMI?

Yes, you can avail an easy loan with EMI from our financial partners, subjected to terms and conditions of the bank.

Am I eligible for a subsidy, and how do I avail it?

Yes, the product is offered with NET subsidized MRP.

Will BORG Astra act as a stabilizer? If so, how?

Yes, BORG Astra series has an inbuilt stabilizer which gives you reliable power, thus protecting your valuable appliances.

Will my air conditioner, LED TV, grinder, lights and fans work with BORG Astra?

Yes. BORG Astra is capable of powering all of these appliances.

How will my after-sales support requirements be met?

Our BORG Care Centre will take care of all your queries, complaints and service requirements during and after installation. All you need to do is dial 1800 3000 2102 (Toll Free) and we will respond promptly.





High Reliability - MPPT



Friendly Alarm System



Frequency Adaptive



Online Protection Function



LCD & LED Display Mode



Hi-Speed Sync Conversion



Intelligent No Load Auto Shutdown



Multi-Setting - PV Priority or AC Priority



Wide Input Range For Long Working Hours



Isolated & Pure Sine Wave Technology



Unattended & Intelligent Monitoring
(R232 or USB, SNMP)

WHAT CAN BORG POWER?

BORG Astra Power Plants come with various energy outputs: 500W, 1000W, 1500W and 2500W. Use the table below to decide on the one ideally suited for your home. Add up the average wattages against each equipment that you may use and see which model is best for you.

Appliance	Avg. Watts*	2500 ZXi	1500 ZXi	1000 Zxi	500 BX / ZX
AC (5 Star rating) - 1.5 T	2000 W	✓	✗	✗	✗
AC (3 Star rating) - .75 T	1200 W	✓	✓	✗	✗
Blender	300 W	✓	✓	✓	✓
Blue-ray player	500 W	✓	✓	✓	✗
DVD player	40 W	✓	✓	✓	✓
Electric chimney	180 W	✓	✓	✓	✓
Exhaust fans	200 W	✓	✓	✓	✓
Fans	60 W	✓	✓	✓	✓
Grinder	750 W	✓	✓	✓	✗
Home theatre	600 W	✓	✓	✓	✗
Induction cook top	1200 W	✓	✗	✗	✗
Iron box	900 W	✓	✓	✗	✗
Juicer	850 W	✓	✓	✓	✗
LED \ LCD TV	140 W	✓	✓	✓	✓
Mixie	600 W	✓	✓	✓	✗
Music system	1000 W	✓	✓	✗	✗
PC	180 W	✓	✓	✓	✓
Printer	900 W	✓	✓	✓	✗
Radio box	60 W	✓	✓	✓	✓
Refrigerator	400 W	✓	✓	✓	✗
Scanner	300 W	✓	✓	✓	✓
Sewing machine	100 W	✓	✓	✓	✓
Thread mill	750 W	✓	✓	✓	✗
Tube lights	40 W	✓	✓	✓	✓
Vaccum cleaner	600 W	✓	✓	✓	✗
Washing machine (top load)	800 W	✓	✓	✓	✗
Water purifier	80 W	✓	✓	✓	✓
Average units generated per month		595 units	360 units	240 units	120 units

*The above chart represents the various appliances which can run using BORG Astra generated energy. It does not indicate that all appliances can run simultaneously. Total load must be calculated based on the plant's capacity. * Under optimum working conditions, tested and verified in our lab.

BORG ASTRA+ Specifications :

Features	2500 ZXi	1500 ZXi	1000 ZXi	500	
				ZX	BX
Solar Rated Power	2500 W	1500 W	1000 W	500 W	250 W
Battery Voltage	48Vdc	48Vdc	24Vdc	24Vdc	
Working mode	PV priority / AC priority	PV priority / AC priority	PV priority / AC priority	PV priority / AC priority	
MPPT Voltage range	48Vdc - 90Vdc	48Vdc - 90Vdc	48Vdc - 90Vdc	24Vdc - 45Vdc	
PV Current (Imp)	<80A	<60A	<50A	<40A	
Max. Charge Current	10A/20A/30A/60A	10A/20A/30A/40A	10A/20A/30A/40A	10A/20A/30A/40A	
Weight Kg (Package)	247.1	152.2	102.0	54	31.5
Conversion Efficiency	≥ 98%				
Output voltage precision	100/110/120/220/230/240VAC ±10%				
PV - AC Transfer time	Less than 3Ms				
Short circuit protection	System automatically shutdown				
Communication interface	(Rs232 / USB /SNMP (Setup available for regular start / shutoff))				
Panel indicator	LCD + LED				
Ambient humidity	10% - 90% (Non Condensed)				
Max. Power of SPV (Pmax)	250wp				
Solar Cell & Efficiency	Poly-crystalline 156x156mm / 17.1%				
Module Dimension	1650x992/40mm				



Sales Enquiries: 1800 3000 1202 (Toll Free) BORG Care Service: 1800 3000 2102 Email: info@borgenergy.com
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