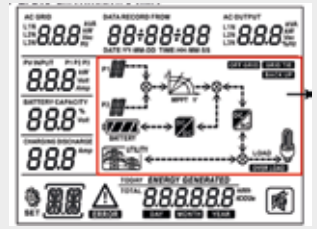




- ON GRIDE-OFF GRIDE-HYBRID
- UP TO 6 PARALLELABILITY
- Pure Sine Wave Output Solar Inverter
- Wide PV Voltage Operating range ,
- Ability to work in parallel with the network
- Programmable Source priority:  
Solar / Battery / Grid / Generator
- Ability to set charging current with the initiative of the user  
with user initiative Selecting the operating mode
- Working without a Battery
- High Efficiency
- Electronics High protection



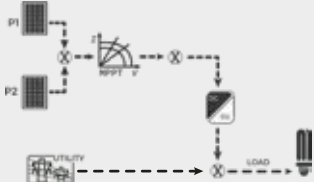
## MULTI MODE OF OPERATION



**STATUS 1**  
The load is primarily fed from Solar Panels.  
If the power generated from the sun is more than the load, the batteries are charged.



**STATUS-2**  
Load is primarily fed from Solar Panels.  
If the power generated from the sun is less than the load, the missing synergy is drawn from the BATTERIES.



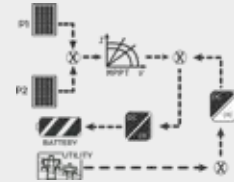
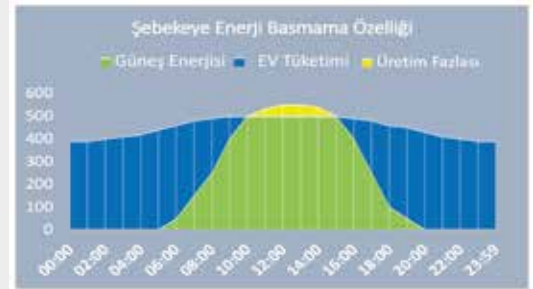
**STATUS-3**  
Load is primarily fed from Solar Panels.  
If the power generated from the Sun is less than the load and the battery is also discharged, the missing synergy is drawn from the NETWORK.



**STATUS-4**  
If there is no load, the energy from the Solar Panels will charge the batteries first.  
If there is an excess of Energy, Energy is added to the NETWORK.



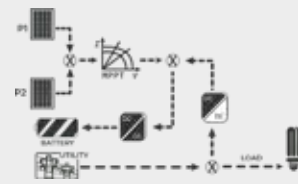
**STATUS-5**  
If there is no solar energy and there is no grid energy, the load is primarily fed from the battery.



**STATUS-6**  
If there is no load or the batteries are deeply discharged, the batteries are fed from both the MAINS and SOLAR ENERGY.



**STATUS-7**  
Depending on the demand, SOLAR ENERGY can provide energy to the network completely. ON GRIDE operation.



**STATUS-8**  
For emergency and critical applications, batteries with grid support are quickly charged from the MAINS.



**STATUS-9**  
UPS (Uninterruptible Power Supply) Operation in places where there is no solar energy

MODEL	abax TRIGEN10K	abax TRIGEN15K
<b>MAXIMUM PV INPUT POWER</b>	15000W	22500W
<b>RATED OUTPUT POWER</b>	10000W	15000 W
<b>MAXIMUM CHARGING POWER</b>	10000W	15000 W
<b>GRID-TIE OPERATION</b>		
PV INPUT (DC)		
Nominal DC Voltage	720 VDC	
Maximum DC Voltage	1000 VDC	900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	
MPP Voltage Range	350 VDC ~ 900 VDC	350 VDC ~ 850 VDC
Full load MPP Voltage Range	400 VDC ~ 900 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers	2	2
Maximum Input Current	2 x 20A	A: 37.65A; B: 18.6A
<b>GRID/UTILITY OUTPUT (AC)</b>		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	184 - 264.5 VAC per phase
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	47.5 ~ 51.5 Hz
Nominal Output Current	14.5 A per phase	21.7 A per phase
Power Factor	> 0.99	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	>96%	
European Efficiency@ Vnominal	>95%	
<b>HYBRID OPERATION</b>		
<b>PV INPUT (DC)</b>		
Maximum DC Power	15000W	22500W
Nominal DC Voltage	720 VDC	
Maximum DC Voltage	1000 VDC	900 VDC
Start-up Voltage / Initial Feeding Voltage	350 VDC ~ 900 VDC	320 VDC / 350 VDC
MPP Voltage Range	400 VDC ~ 900 VDC	350 VDC ~ 850 VDC
Number of MPP Trackers	2	
Maximum Input Current	2 x 20A	A: 37.65A; B: 18.6A
<b>GRID/UTILITY OUTPUT (AC)</b>		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	184 - 264.5 VAC per phase
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	47.5 ~ 51.5 Hz
Nominal Output Current	14.5 A per phase	21.7 A per phase
Power Factor	> 0.99	
<b>OFF-GRID OPERATION</b>		
AC Start-up Voltage	120 - 140 VAC per phase	
Auto Restart Voltage	180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40 A per phase	
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Frequency	50 Hz / 60 Hz (auto sensing)	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	91%	
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	48 VDC	
Maximum Charging Current	Default 60A, 5A - 200A (Adjustable)	
<b>GENERAL</b>		
<b>PHYSICAL</b>		
Dimension, D X W X H (mm)	622 x 500 x 167.5	219 x 650 x 820
Net Weight (kgs)	45	62
<b>INTERACE</b>		
Communication Port	RS-232/USB	RS-232, USB and Dry contact
Intelligent Slot	Optional SNMP, Modbus, WI-FI and GPRS card	Optional SNMP, Modbus and AS-400 cards available
<b>ENVIRONMENT</b>		
Humidity	0 ~ 90% RH (No condensing)	
Operating Temperature	-10 to 55°C	
Altitude	0 ~ 1000 m**	

\* These figures are based on the VDE-4105 standard.  
All figures may vary due to different AC voltage and country requirements.  
\*\* Product specifications are subject to change without prior notice.

