



**3:3**  
FAZ

-  VERİ MERKEZİ
-  MEDİKAL
-  ENDÜSTRİ
-  ULAŞIM
-  ACİL DURUM

# MULTILINE HYBRID SOLAR UPS Three-Phase from 10 - 120 kVA

-  3 LEVEL UPS
-  VFI TYPE  
UPS ONLINE
-  TOWER
-  96%  
HIGH EFFICIENCY
-  LI-ION BATTERY  
LI-ION READY
-  SOLAR CONNECTION



# Multiline Hybrid Solar UPS

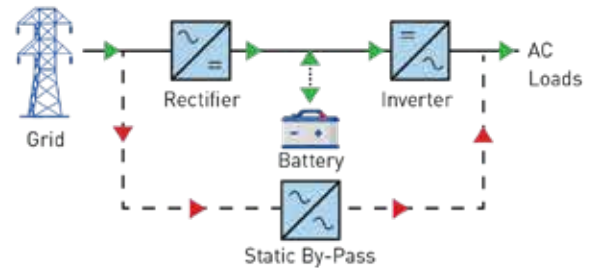
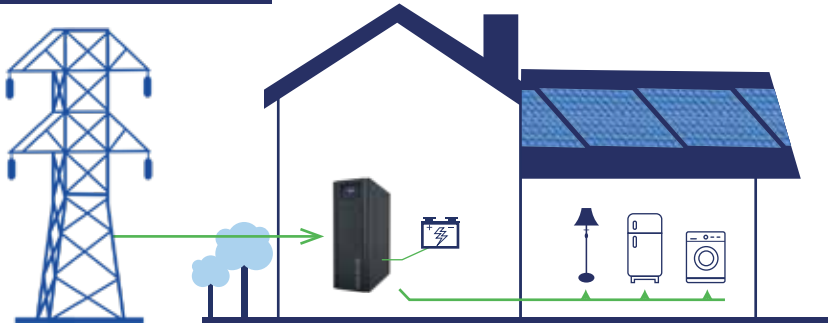
Get your energy from the sun with Inform's new generation HYBRID SOLAR UPS.

UPS + OFF-GRID INVERTER + ON-GRID INVERTER + HYBRID INVERTER + ENERGY STORAGE

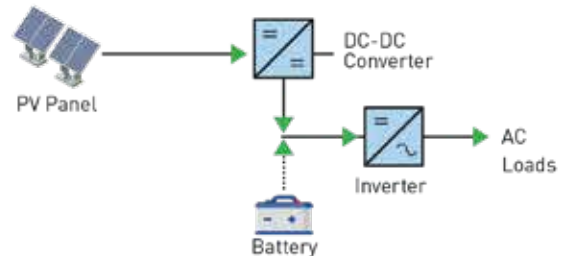
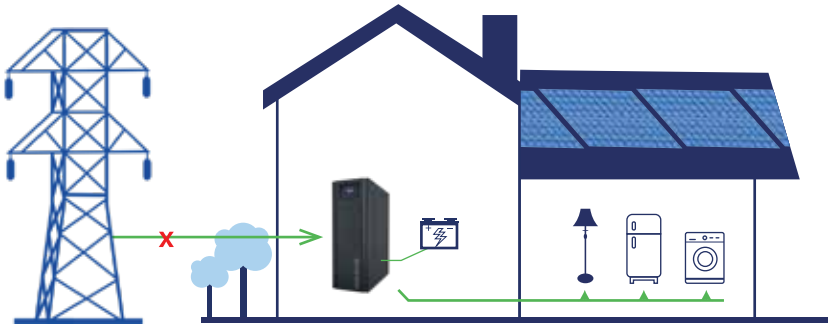
- The new hybrid technology intelligently offers the most economical and ecological power option for loads.
- It is primarily powered by solar energy to amortize your investment.
- Thanks to MPPT applications, maximum gain is achieved from the energy obtained from solar panels.
- Thanks to the battery bank, the clean energy produced is stored and supplied to the system in case of any power outage. Energy continues to be supplied.
- Intelligent control system provides real-time information service to users. In addition, smart energy management is provided according to different climates and user types.
- It provides full protection against all kinds of electrical problems without the need for any intervention like a traditional on-line UPS.
- Thanks to the hybrid system, in cases where solar energy and battery are insufficient and the network is cut off. The emergency generator is automatically activated and uninterrupted power is provided to the user.



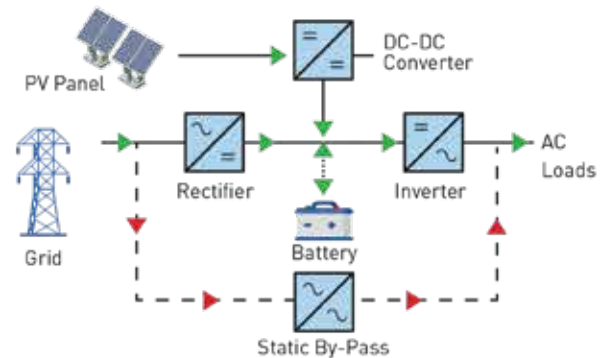
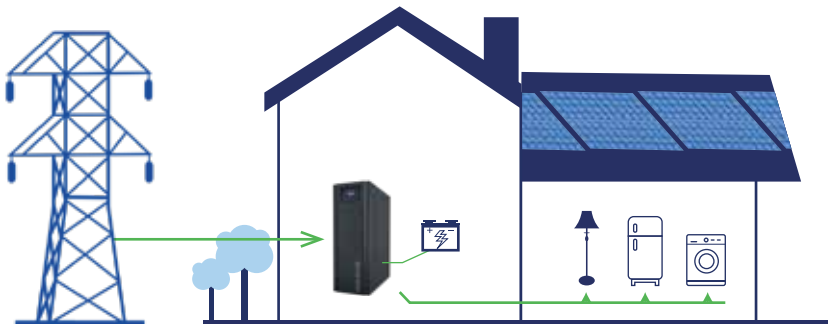
## UPS Working Mode



## Off-Grid Inverter Working Mode



## Hybrid Inverter Working Mode



# Monoline & Multiline Hybrid Solar UPS

MODEL	MNL HYB 1106U1 MNL HYB 1106U2	MNL HYB 1110U1 MNL HYB 1110U2	MTL HYB 3310U1 MTL HYB 3310U2	MTL HYB 3315U1 MTL HYB 3315U2	MTLHYB 3320U1 MTLHYB 3320U2
Nominal power (kVA)	6	10	10	15	20
<b>General</b>					
Technology	3-Level, Double conversion Online VFI-SS-111				
Waveform	Sinusoidal				
Architecture	Stand Alone or Optional Parallel				
<b>Input</b>					
Input Voltage	380, 400, 415 V 3F+N+PE				
Input Frequency	45-65 Hz				
Voltage Tolerance (%100 load)	%(-20) %(+20)				
Voltage Tolerance (%50 load)	%(-36) %(+20)				
Input Power Factor	≥0,99				
Input Current Harmonic	%3				
<b>PV Input</b>					
Max. Pv Input Power	5000 W	8000 W			12000 W
Max PV voltage / MPPT Gr. Range	200 - 350 VDC (1 Kol) 400 - 500 VDC (2 Kol)			250 - 350 VDC (1Kol) 500 - 700 VDC (2 Kol)	
<b>Output characteristics</b>					
Output Voltage	380, 400, 415 V 3F+N+PE				
Output Voltage Tolerance	±%1				
Overall Efficiency* (AC-AC)	Up to 96% (Half load)				
Ecomode Efficiency	Up to 98% (Optional)				
Nominal Output Frequency	50/ 60Hz +0,01 free run (Adjustable from LCD Panel)				
Crest Factor	3:1				
Output Power Factor	1 (U1 model) / 0,9 (U2 model)				
THD of Output Voltage	≤2% (Linear load) & ≤5% (Non-linear load)				
<b>Bypass</b>					
Bypass	Built in Automatic and Maintenance Bypass				
Voltage Tolerance	±10%				
Transfer Time	0 ms				
Overload Capability	150% load 1 minute				
<b>Batteries</b>					
Battery Type	VRLA-AGM / GEL / NiCd / Li-ion				
Battery Test	Automatic or Manual				
Battery Charge Time	<6h-8h				
<b>Communication and management</b>					
LCD Display	Graphical Icd screen, Led bar status				
Communication Ports (Optional)	RS485, Genset, SNMP, GSM Modem, Relay Contacts, Input Contacts, Modbus and USB				
Battery Temperature Sensor Contact	Available				
Emergency Power Off (Epo)	Available				
Accessories (Optional)	Galvanic Isolation Transformer, Remote Monitoring Panel				
<b>Battery Quantity</b>					
External Cabinet with 13A Charger Option	16-46 pcs		30-46 adet (Default 40 pcs)		-
<b>Physical characteristics</b>					
Dimensions W x D x H (mm)	635X256X580	735X256X673	305 x 735 x 855		325 x 895 x 1078
Net Weight (kg)	30	38	51		90
<b>Ambient conditions</b>					
Operating temperature (°C)	0°C - 40°C				
StorageTempature	-15°C/+ 55°C				
Proposed Temp. to Extend Battery Life	20 - 25°C				
Altitude	< 1500m				
Noise (at 1 meter)	<55 dBA		<58 dBA		<60 dBA
Protection Class	IP20 (Higher IP Ratings are optional)				
<b>Compliance</b>					
Reference Product Standards	EN 62040-1 (Safety), EN 62040-2 (EMC), EN 62040-3 (Performance)				

\*Depends on Input/Output voltage conditions and power

# Multiline Hybrid Solar UPS

MODEL	MTL 3330U1 MTL 3330U2 MTL 3330U3	MTL 3340U1 MTL 3340U2 MTL 3340U3	MTL 3360U1 MTL 3360U2 MTL 3360U3	MTL 3380U1 MTL 3380U2 MTL 3380U3	MTL 33100U1 MTL 33100U2 MTL 33100U3	MTL 33120U1 MTL 33120U2 MTL 33120U3
Nominal power (kVA)	30	40	60	80	100	120
<b>General</b>						
Technology	3-Level, Double conversation Online VFI-SS-111					
Waveform	Sinusoidal					
Architecture	Stand Alone or Optional Parallel					
<b>Input</b>						
Input Voltage	380, 400, 415 V 3Ph+N+PE					
Input Frequency	45-65 Hz					
Voltage Tolerance (%100 load)	%(-20) %(+20)					
Voltage Tolerance (%40 load)	%(-36) %(+20)					
Input Power Factor	≥0,99					
Input Current Harmonic	%3					
<b>Output characteristics</b>						
Output Voltage	380, 400, 415 V 3Ph+N+PE					
Output Voltage Tolerance	±%1					
Overall Efficiency* (AC-AC)	Up to 96% (Half load)					
Ecomode Efficiency	Up to 98% (Optional)					
Nominal Output Frequency	50/ 60Hz +0,01 free run (Adjustable from LCD Panel)					
Crest Factor	3:1					
Output Power Factor	1 (U1 model) / 0,9 (U2 model) / 0,8 (U3 model)					
THD of Output Voltage	≤2% (Linear load) & ≤5% (Non-linear load)					
<b>Bypass</b>						
Bypass	Built in Automatic and Maintenance Bypass					
Voltage Tolerance	±%10					
Transfer Time	0 ms					
Overload Capability	150% load 1 minute					
<b>Batteries</b>						
Battery Type	VRLA-AGM / GEL / NiCd / Li-ion					
Battery Test	Automatic or Manual					
Battery Charge Time	<6h-8h					
<b>Communication and management</b>						
LCD Display	Graphical Icd screen, Led bar status					
Communication Ports (Optional)	RS485,Genset, SNMP, GSM Modem, Röle Kontakları, Giriş Kontakları, Modbus ve USB					
Battery Temperature Sensor Contact	Available					
Emergency Power Off (Epo)	Available					
Accessories (Optional)	Galvanic Isolation Transformer, Remote Monitoring Panel					
<b>Physical characteristics</b>						
Dimensions W x D x H (mm)	325 x 895 x 1078	420 x 940 x 1330 (U1-40 kVA) 325 x 895 x 1078 (U1 & U2)		432 x 930 x 1257 (U1 & U2)		
Net Weight (kg)	71 (U1)/65 (U2)	90 (U1)/71 (U2)		125 (U1)/115 (U2)	135 (U1)/125 (U2)	140 (U1)/130 (U2)
<b>Çevre Koşulları</b>						
Operating temperature (°C)	0°C - 40°C					
StorageTempature	-15°C/+ 55°C					
Proposed Temp. to Extend Battery Life	20 - 25°C					
Altitude	< 1500m					
Noise (at 1 meter)	<55 dBA			<58 dBA	<60 dBA	
Protection Class	IP20 (Higher IP Ratings are optional)					
<b>Compliance</b>						
Reference Product Standards	EN 62040-1 (Safety), EN 62040-2 (EMC), EN 62040-3 (Performance)					

\*Depends on Input/Output voltage conditions and power