# **LEONICS**®

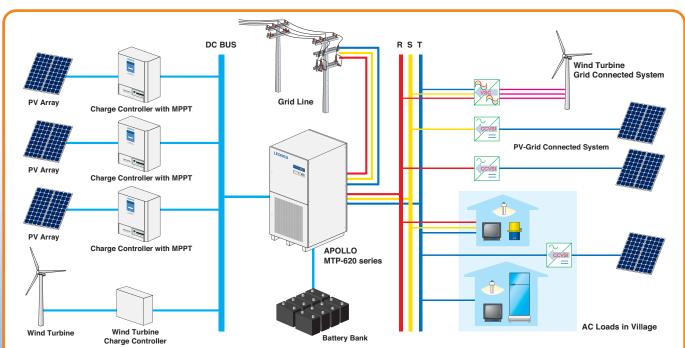


- Three phase bidirectional inverter with built-in output transformer
- Low harmonic distortion (less than 4%)
- High efficiency > 95%
- High reliability design for remote area
- Seperate DC Bus for multiple source charging

## APOLLO MTP-620

# THREE PHASE BIDIRECTIONAL DUAL MODE HYBRID INVERTER WITH UTILITY CONNECTED CAPABILITY

- Capable to use with multiple renewable energy sources in both DC coupling and AC coupling such as solar panel, wind turbine generator and micro hydro generator
- DC external charge control
- Monitor energy available from the renewable energy (DC) sources and minimize the charging current from the grid line
- Provide uninterruptible backup power to loads when utility grid line is not available
- Feed excess energy back to grid line
- Operate with Hybrid Control Command Unit (HCCU)
- Automatic battery equalization to prevent battery capacity loss and prolong battery life
- Battery temperature compensation (option)
- ISO 9001 and ISO 14001 certified factory



APOLLO MTP-620 series is a Three phase bidirectional dual mode hybrid inverter with utility connected capability. It can operate as grid tie inverter when utility grid line is available to reduce energy consumption in the industry and can become backup power source for the selected section or the whole house by using energy from PV and battery when utility grid line is not available. It can also be used with external DC charge controller.







### APOLLO MTP-620 series THREE PHASE BIDIRECTIONAL DUAL MODE HYBRID INVERTER WITH UTILITY CONNECTED CAPABILITY

### **SPECIFICATIONS**

MODEL		MTP-622E	MTP-623F	MTP-624F	MTP-625F	MTP-626F	MTP-627F	MTP-628F	MTP-629F	MTP-6210F	MTP-6211H	MTP-6213H	H MTP-6215H	MTP-6217H		
RATED POWER		15 kW	25 kW	30 kW	45 kW	60 kW	75 kW	90 kW	100 kW	120 kW	150 kW	200 kW	250 kW	300 kW		
BATTERY	Nominal Voltage	120 Vdc	120 Vdc 240 Vdc 480 Vdc													
	Max. charging current	84 A	70 A	84 A	125 A	168 A	200 A	250 A	280 A	335 A	200 A	280 A	350 A	418 A		
EXTERNAL DC	Nominal voltage	120 Vdc				240 Vdc					480 Vdc					
CHARGER	Maximum current	100 A	100 A	100 A	200 A	300 A	300 A	400 A	400 A	400 A	300 A	400 A	400 A	500 A		
	DC charge control	Relay dry contact 10 A (for over external charge protection)														
AC INPUT	Recommended	> 30 kW	> 50 kW	> 60 kW	> 90 kW	> 120 kW	> 150 kW	> 180 kW	> 200 kW	> 240 kW	> 300 kW	> 400 kW	> 500 kW	> 600 kW		
	generator power															
	Voltage	380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N) ± 10%														
	Phase	Three phase														
	Frequency	50 / 60 Hz ± 3 Hz														
AC OUTPUT	Voltage		380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N)													
(BATTERY MODE)	Voltage regulation		± 5% (steady load), < 7% at 100% step load within 0.1 sec.													
	Phase							phase								
	Frequency					50		% (auto sensir	ıg)							
	Wave form		Pure sine wave													
	Total harmonic distortion		total < 4%													
	Maximum surge current		200% at 2 sec.													
ISOLATION	Galvanic isolation	yes														
EFFICIENCY	Inverter peak efficiency	> 94%														
PROTECTION			Over current, Over load, Short circuit, Over temperature, Over voltage, Under voltage													
INDICATOR	LED	AC Input, Generator Failure, Stand by/Run, Inverter, Charging, Load on Inverter, Overload, Low Battery, High temperature, Fault														
	LCD display	Inverter voltage, Inverter current, Inverter frequency, Inverter power, AC input voltage, AC input current, AC input frequency, AC input power,														
		Load voltage, Load current, Load power, Battery voltage, Battery current, Battery state of charge(%), Internal charging current, External DC charging current,														
Battery temperature (option), Equalizatiton Date, Today Energy (Inverter, AC Input, Battery), Accumulated energy (Inverter, AC Input System status, Time, Date, Heat sink temperature, Data Log										nput, Battery)	,					
AUDIABLE ALARM		Low battery, Inverter fault, High temperature														
COOLING		Automatic cooling fan														
ENVIRONMENT	Temperature		0 - 45°C													
	Relative humidity	0 - 95 % (Non - condensing)														
DESIGN							AS/NZ 3	100:2002								
STANDARD																
DIMENSION	Control Unit	60 x 188 x 105 90 x 188 x 105 80 x 205 x 105 D1* D2**							^	05 x 105						
W x H x D (cm)	Transformer Unit		- 120 x 205 x 105					110 x 2	05 x 105							
WEIGHT	Control Unit	412	440	450	500	805	850	527	527	527	527	527 745	745	745		
(approx. in kg)	Transformer Unit	-	-	-	-	-	-	880	910	970	1,500	1,620 1,500	1,600	1,800		

 $D1^* = 80 \times 205 \times 105$  cm for control unit and  $120 \times 205 \times 105$  for transformer unit,  $D2^{**} = 110 \times 205 \times 105$  cm for control unit and transformer unit. Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

**Authorized Distributor** 

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