LEONICS_®



• Three phase quad-directional inverter with built-in output transformer and MPPT charge controller

APOLLO MTP-620p

Mini-Grid Inverter with Quad Directional Energy Flow

- Minimum hardware cost
- Lowest cost of energy with hybrid AC-DC coupling
- Power rating from 120 to 300 kW for each inverter and 50 kW to 200 kW MPPT charge controller
- Can parallel operation of inverters for total inverter power up to 1,200 kW and up to 2,000 kWp of PV
- Design for operate in Micro grid operation with utility line or operate as stand-alone PV-DG Hybrid System
- Parallel configuration up to 4 units of inverter
- Provide backup power to load when utility grid line is not available
- Supply load and charge battery from PV panels at the same time
- Overall conversion efficiency > 97%
- ISO 9001 and ISO 14001 certified factory



LEONICS_®

A5043 ISO 9001

APOLLO MTP-620p series Three Phase Mini-Grid Inverter with Quad Directional Energy Flow

MODEL			MTP-6210Hp	MTP-6211Hp	MTP-6	213Hp	MTP-6215Hp	MTP-6217Hp
RATED POWER	PV input		≤ 170 kWp	≤ 250 kWp	≤ 350	kWp	≤ 400 kWp	≤ 500 kWp
	AC output		120 kW	150 kW	200	kW	250 kW	300 kW
	DC output		50 kW	100 kW	150	kW	150 kW	200 kW
DC OUTPUT	Voltage range		500 - 600 Vdc					
BATTERY	Nominal Voltage		480 Vdc					
	Max. charging current from PV		95 A	190 A	285	5 A	285 A	380 A
	Max. charging current from INV.		95 A	190 A	285	5 A	285 A	380 A
	Max. total charging current		95 A	190 A	285	5 A	285 A	380 A
PV INPUT	MPPT voltage range		560 - 700 Vdc					
	(Vmp of PV string)							
	Maximum open circuit voltage		850 Vdc					
	(V _{OC} of PV string)							
	Maximum PV current		310 A	450 A	625	5 A	720 A	900 A
AC INPUT FROM	Voltage		380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N) ± 10%					
GRID LINE OR	Phase		Three phase four wires					
GENERATOR	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), < 4% at 100% step load within 0.1 sec.					
	Phase		Three phase four wires					
	Frequency		50 / 60 Hz ± 0.1%					
	Wave form		Pure sine wave					
	Total harmonic distortion		total < 4%, each < 3%					
	Maximum surge current		200% at 2 sec.					
ISOLATION	Galvanic isolation		yes					
EFFICIENCY	Inverter peak efficiency		> 96%					
	Charge controller peak efficiency		> 98.5%					
PROTECTION	Max. overall PV conversion eff.		>9/%					
INDICATOR	Inverter display		Over current, Over load, Short circuit, Over temperature, Over voltage, Under voltage					
		LED	AC Input, Generator Failure, Stand by/Run, Inverter, Charging, Battery supply switch, Overload, Low Battery, High temperature, Fault					
		LCD	Inverter voltage, Inverter current, Inverter frequency, Inverter power, AC input voltage, AC input frequency, Battery voltage, Battery current, Battery state of charge(%), PV voltage, PV current, PV power, Battery temperature (option), Equalization Date, Today AC inverter energy (Input, Output), Today DC inverter energy (Input, Output), Accumulated AC inverter energy (Input, Output), Accumulated DC inverter energy (Input, Output), Suptom status, Time, Date, Heat sink temperature					
			Low battery Inverter fault High temperature					
			Automatic cooling fan					
ENVIRONMENT	Temperature		0 - 50°C					
	Relative humidity		0 - 95 % (Non - condensing)					
DESIGN STANDARD	- Total o Humany		AS/NZ 3100:2002					
DIMENSION	Control Unit		80 x 205 x 105 80 x 205 x 105 80 x 205 x 105 110 x 205 x 105					
$(W \times H \times D (cm))$	Transformer unit		120 x 205 x 105	120 x 205 x 105	120 x 205 x 105	110 x 205 x 105	110 x 205 x 105	110 x 205 x 105
WEIGHT	Control unit		550	550	550	775	775	775
(Approximate in kg)	Transformer unit		935	1,200	1,320	1,220	1,400	1,500

Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

Authorized Distributor

LEO ELECTRONICS CO., LTD.

27, 29 Soi Bangna-Trad Rd 34, Bangna, Bangna, Bangkok 10260 THAILAND Phone. 0-2746-9500, 0-27468708 Fax. 0-2746-8712 e-mail : RNE@leonics.com

• www.leonics.com •

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