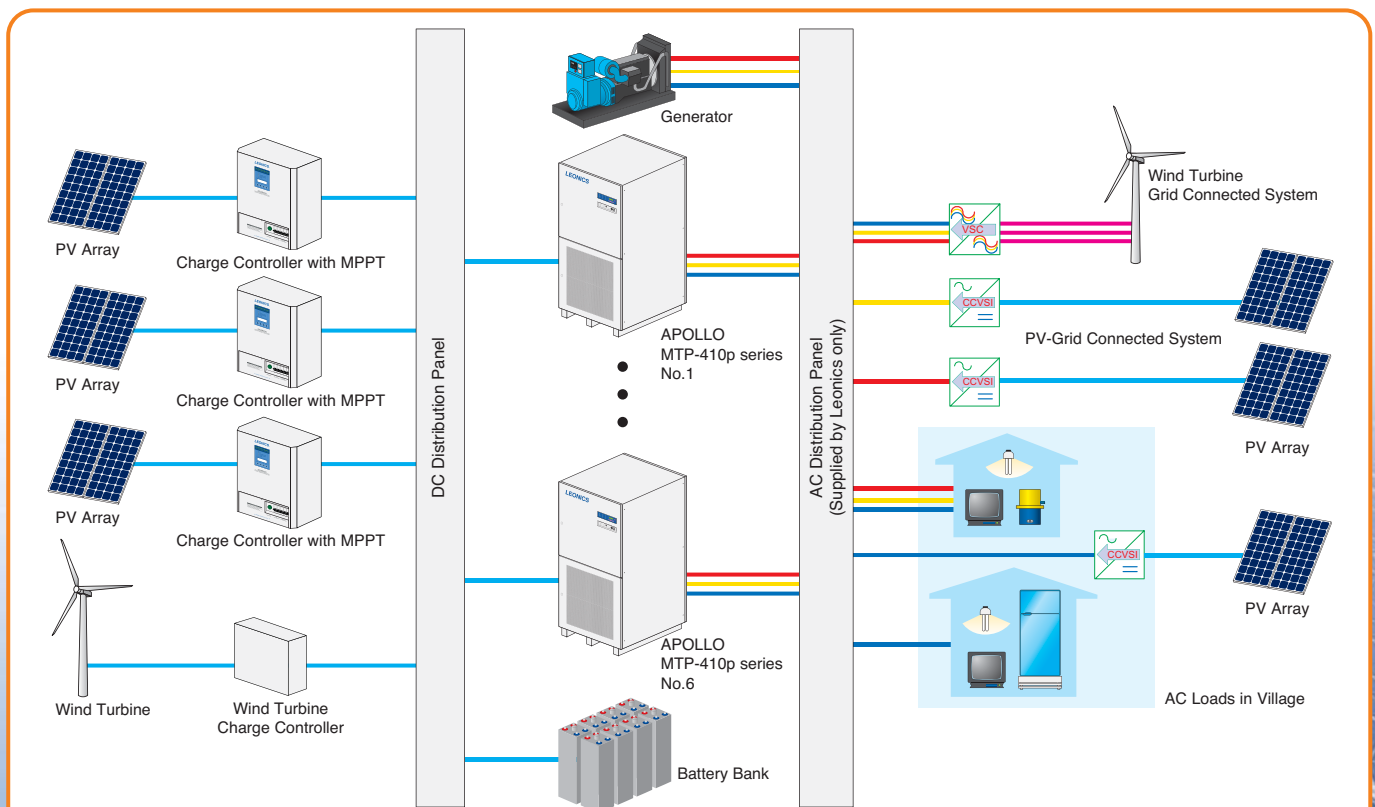


APOLLO MTP-410p

Three Phase Bidirectional Parallel Inverter for Mini-grid System



- Three phase bidirectional inverter with built-in output transformer
- Low harmonic distortion (less than 3%)
- High efficiency > 95%
- Capable to use with multiple renewable energy sources in both DC coupling and AC coupling such as PV panel, wind turbine generator and micro hydro generator
- Generator connected signal when the generator provide as other energy source of the system
- Parallel configuration up to 6 units of inverter
- Capable to operate in N+1 redundancy configuration for very high reliability in remote area
- Separate DC Bus for multiple source charging
- No master unit required
- Expandable power by adding inverter from 1 to 6 units without master controller
- ISO 9001 and ISO 14001 certified factory



APOLLO MTP-410p series is a three phase bidirectional stand-alone inverter capable of functioning as a main supply power source. The inverter features high efficiency in both charger and inverter modes with maximum efficiency of 95%. It is suitable for three phase large hybrid system in off-grid areas.

APOLLO MTP-410p series Three Phase Bidirectional Parallel Inverter for Mini-Grid System

MODEL		MTP-411Ep	MTP-412Ep	MTP-413Ep	MTP-411Fp	MTP-412Fp	MTP-413Fp	MTP-414Fp	MTP-415Fp	MTP-416Fp	MTP-417Fp	MTP-418Fp	MTP-419Fp	MTP-4110Fp	MTP-4111Hp	MTP-4113Hp	MTP-4115Hp	MTP-4117H	
RATED POWER		10 kW	15 kW	25 kW	10 kW	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			240 Vdc										480 Vdc				
	Max.charging current	56 A	84 A	130 A	28 A	42 A	72 A	84 A	125 A	168 A	200 A	250 A	280 A	335 A	200 A	280 A	350 A	418 A	
	Max. battery current	114 A	170 A	284 A	57 A	85 A	142 A	170 A	255 A	340 A	425 A	510 A	570 A	680 A	425 A	570 A	710 A	850 A	
EXTERNAL DC CHARGER	Nominal voltage	120 Vdc			240 Vdc										480 Vdc				
	Maximum current	100 A	100 A	200 A	57 A	60 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	
AC OUTPUT	Voltage	380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N)																	
	Voltage regulation	± 3% (steady load), < 7% at 100% step load within 0.1 sec.																	
	Phase	Three phase																	
	Frequency	50 / 60 Hz ± 0.1% (auto sensing)																	
	Wave form	Pure sine wave																	
	Total harmonic distortion	total < 3%																	
	Max. surge current	200%																	
	Max. AC current	15.2 A	22.7 A	37.8 A	15.2 A	22.7 A	37.8 A	45.4 A	68.2 A	90.9 A	113.6 A	136.3 A	151.5 A	181.8 A	227.3 A	303 A	378.8 A	454.5 A	
ISOLATION	Galvanic isolation	yes																	
EFFICIENCY	Inverter peak efficiency	> 94%							> 95%										
PROTECTION		Over current, Over load, Short circuit, Over temperature, Over voltage, Under voltage																	
INDICATOR	LED	External Charging, Bypass, AC Bus, Generator Failure,Stand by/Run, Inverter, Charging, Load on Inverter, Overload, Low Battery, High temperature, Fault																	
	LCD display	Inverter (voltage, current, frequency, power, reactive power), Generator (voltage, current, frequency, power, reactive power), Battery (voltage, current, state of charge(%), charging current), Heat sink temperature, Battery temperature (option), Equalization date, Today DC Inverter Energy (Input, output), Today AC Inverter Energy (input, output), Accumulated DC energy (input, output), Accumulated AC Energy (input, output), System status, Time, Date, Data Log																	
		Low battery, Inverter fault, High temperature																	
AUDIBLE ALARM		Automatic cooling fan																	
COOLING		0 - 45°C																	
ENVIRONMENT	Temperature	0 - 95 % (Non - condensing)																	
	Relative humidity																		
DESIGN REGULATION	Standard	AS/NZ 3100:2002																	
DIMENSION W x H x D (cm)	Control Unit	60 x 188 x 105								90 x 188 x 105			120 x 205 x 105			80x205x105	D1*	D2**	110 x 205 x 105
	Transformer Unit	-								-			-			120x205x105			110 x 205 x 105
WEIGHT (approx. in kg)	Control Unit	430	440	450	430	440	450	460	630	760	830	990	1,020	1,040	500	530	775	775	775
	Transformer Unit	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	1,240	1,200	1,300	1,500

D1* = 80 x 205 x 105 cm for control unit and 120 x 205 x 105 for transformer unit, D2** = 110 x 205 x 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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