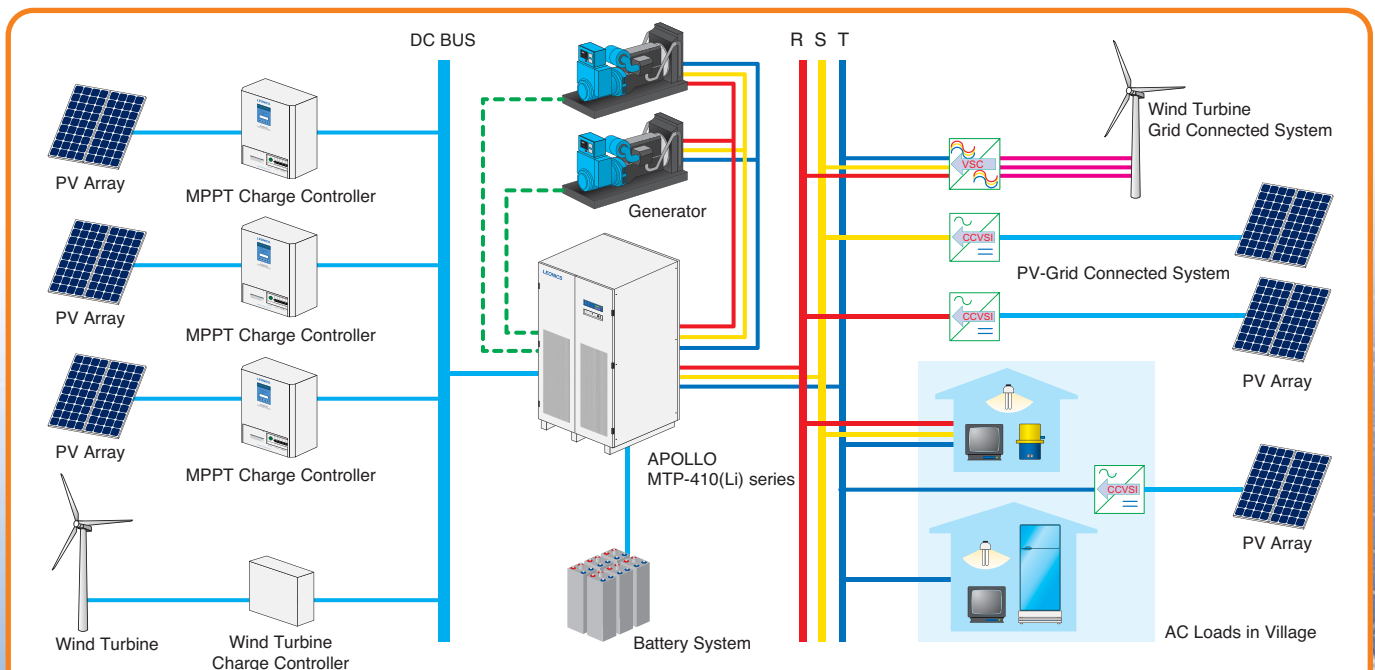




APOLLO MTP-410(Li)

Three Phase Bidirectional Dual Mode Hybrid Inverter for Mini-grid System

- Three phase bidirectional inverter with built-in output transformer
- Design for using with lead acid and Li-ion battery
- Low harmonic distortion (less than 3%)
- High efficiency > 95%
- High reliability design for remote area
- Separate DC Bus for multiple source charging
- Capable to use with multiple renewable energy sources in both DC coupling and AC coupling such as solar (PV) panel, wind turbine generator and micro hydro generator
- Monitor energy available from the renewable energy (DC) sources and minimize the charging current from the diesel generator
- Automatic / Manual generator control
- Frequency shift energy management control
- Automatic battery equalization (option)
- Battery temperature compensation (Temperature sensor is not included)
- Preset time schedule by System Command Unit (SCU) for automatic controlling the auxiliary power sources such as generators in mini-grid system (option)
- IP65 protection outdoor enclosure (option)
- Parallel operation (option)
- ISO 9001 and ISO 14001 certified factory



APOLLO MTP-410 (Li) series is a Three phase bidirectional dual mode hybrid inverter capable of functioning as a main supply power source as well as providing automatic control and management of a generator and battery bank. The inverter features very high efficiency in both charger and inverter modes with maximum efficiency of 95%. It is suitable for hybrid power system with supplement diesel generator in off-grid areas.

APOLLO MTP-410(Li) series

Three Phase Bidirectional Dual Mode Hybrid Inverter for Mini-Grid System

MODEL		MTP-418K(Li)	MTP-419K(Li)	MTP-4110K(Li)
RATED POWER		90 kVA / 90 kW	100 kVA / 100 kW	120 kVA / 120 kW
BATTERY	Voltage range	620 - 870 Vdc		
	Max.AC charging current	90 A	100 A	120 A
	Max. battery current (discharging / charging)	162 A	180 A	216 A
EXTERNAL DC (PV) CHARGER	Voltage range	620 - 870 Vdc		
	Max. charging current	160 A	160 A	200 A
AC INPUT FROM GENERATOR	Recommended generator power	> 225 kVA	> 250 kVA	> 300 kVA
	Voltage	380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N) ± 10%		
	Phase	Three phase		
	Frequency	50 / 60 Hz ± 3 Hz		
	Max. AC current	287 A	319 A	382 A
	Automatic start / stop	Relay dry contact 10 A (2 sets of ACC contact for 2 generators)		
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. Inverter AC current	136.3 A	151.5 A	181.8 A
ISOLATION	Galvanic isolation	yes		
EFFICIENCY	Inverter peak efficiency	> 95%		
PROTECTION		Over current, Over load, Short circuit, Over temperature, Over voltage, Under voltage		
INDICATOR	LED	External Charging, Bypass, Generator Running, 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		
AUDIABLE ALARM		Low battery, Inverter fault, High temperature		
COOLING		Automatic cooling fan		
ENVIRONMENT	Temperature	0 - 45°C		
	Relative humidity	0 - 95 % (Non - condensing)		
DESIGN	Standard	AS/NZ 3100:2002, IEC 61683 (for efficiency test)		
REGULATION	Enclosure	IP31		
DIMENSION	W x H x D (cm)	120 x 205 x 105		
WEIGHT	Approx. in kg	990	1,143	1,193

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

Authorized Distributor

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