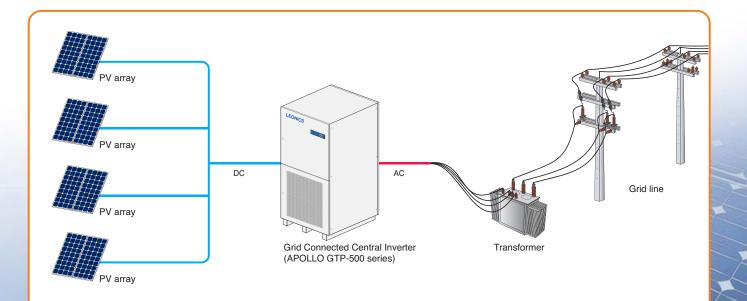
# **LEONICS**<sub>®</sub>



## **APOLLO GTP-500**

### Three Phase Grid Connected Central Inverter

- Three phase grid connected inverter with built-in output transformer
- Maximum inverter efficiency > 96%
- Low Total Harmonic Distortion (THDi)
- Integrate with PV Maximum Power Point Tracking (MPPT)
- Over and under voltage and frequency protections
- Islanding protection (IEC 61727 and IEC 62116) compliance) during failure of utility grid power supply
- Automatic start and shutdown during over heating
- Superior user protection with galvanic isolation
- Display LCD unit for voltage, current, watt, energy, and accumulated energy at inverter for each phase and three phase
- Master and slave operation for higher system
  energy production (option)
- ISO 9001 and ISO 14001 certified factory



The APOLLO GTP-500 Series is high performance three phase grid connected central inverter that integrated with PV maximum power point trackers (MPPT) to extract maximum power generated from the PV arrays, and also system protection during failure of utility grid power supply. The APOLLO GTP-500 series inverter is suitable for medium to large scale grid connected solar power system.

Grid Connected Power System

# LEONICS<sub>®</sub>



### APOLLO GTP-500 series Three Phase Grid Connected Central Inverter

### SPECIFICATIONS

MODEL		GTP-501	GTP-502	GTP-503	GTP-504	GTP-505	GTP-506	GTP-507	GTP-508	GTP-509	GTP-510	GTP-511	GTP-512	
RATED POWER	PV input	33 kW	49.5 kW	66 kW	82.5 kW	99 kW	115.5 kW	137.5 kW	165 kW	198 kW	220 kW	247.5 kW	275 kW	
	AC output at 25°C $\cos \varphi = 1$	30 kVA/30 kW	45 kVA/45 kW	60 kVA/60 kW	75 kVA/75 kW	90 kVA/90 kW	105 kVA/105 kW	125kVA/125 kW	150kVA/150 kW	180kVA/180 kW	200kVA/200 kW	225 kVA/225 kW	250 kVA/250 kW	
SYSTEM		IGBT technology												
PV INPUT	MPPT voltage range	270 to 500 Vdc (300 to 500 Vdc optional) 400 to 700 Vdc												
	(V <sub>mp</sub> of PV string)	(calculate by using V <sub>mp</sub> )							(calculate by using V <sub>mp</sub> )					
	Maximum open circuit	550 Vdc (600 Vdc optional)							780 Vdc					
	voltage (V <sub>OC</sub> of PV string)	(calculate by using V <sub>OC</sub> )							(calculate by using V <sub>oc</sub> )					
	Maximum PV current	125 A	170 A	225 A	280 A	340 A	395 A	465 A	375 A	450 A	500 A	565 A	625 A	
AC OUTPUT	Grid line voltage	380 / 400 / 415 Vac (L-L), 220 / 230 / 240 Vac (L-N) (-15%, +10 %)												
TO GRID LINE	Phase	Three phase four wires												
	Frequency	50 / 60 Hz ± 0.5 Hz (± 0.2 Hz to ± 5 Hz adjustable)												
	Power factor		> 0.98											
	Total harmonic distortion		THDi < 3%											
	Maximum AC current	45.4 A	68.2 A	90.9 A	113.6 A	136.3 A	159 A	189.3 A	227.2 A	272.2 A	303 A	340.9 A	378.8 A	
ISOLATION	Galvanic isolation	yes												
EFFICIENCY	Inverter peak efficiency		> 93	8.0%		> 94.0% > 95.9%			> 96.0% > 96.3					
PROTECTION	Input / Output	Over voltage, under voltage (AC&DC), frequency (AC)												
	Islanding operation		Active and passive anti-islanding											
	Over heat	Automatic shutdown and restart												
	Surge dissipation		20 kA Category C1 for AC (separate supply)											
INDICATOR	LED		Mains, Operating, Synchronize, PV, Over temp., Alarm											
	LCD display	Input (voltage, current, power, frequency), Generated power, Generated energy, Accumulated energy, PV (voltage, current, power, energy, accumulated energy), status												
AUDIBLE ALARM		Mains failure, inverter fault												
POWER		less than 40 Watt in standby mode,												
CONSUMPTION		0 Watt in sleep mode												
COOLING		Force fan cooling												
ENVIRONMENT	Temperature		0 - 45°C											
	Relative humidity		0 - 95 % (non - condensing)											
DESIGN	Standard	IEC 61727, IEC 62116, IEC 60335-1, AS 3100, AS 4777												
REGULATION	Enclosure	IP 20												
DIMENSION	Top-entry		60 x 188 x 105			90 x 205 x 105				120 x 205 x 105				
(W x H x D) (cm)	Bottom-entry		8 x 105	60x188x105		90 x 188 x 105				120 x 205 x 105				
WEIGHT	Top-entry	544	558	590	873	873	911	911	1,050	1,250	1,350	1,538	1,538	
(approx. in kg)	Bottom-entry	438	530	580	827	827	865	865	1,050	1,250	1,350	1,595	1,595	

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 Tai, Bangna, Bangkok 10260 THAILAND Phone. 0-2746-9500, 0-27468708 Fax. 0-2746-8712 e-mail : RNE@leonics.com

• www.leonics.com •