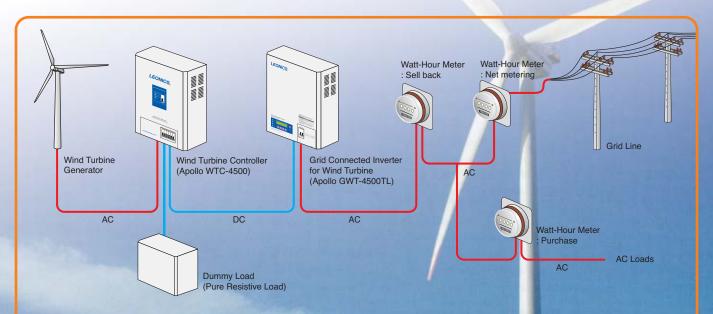
# **LEONICS**<sub>®</sub>



### APOLLO GWT-4500TL

### GRID CONNECTED INVERTER FOR WIND TURBINE

- Pure sine wave power output
- High efficiency > 95%
- Low Harmonic Distortion (THDi) less than 4%
- Microprocessor control
- Islanding protections during failure of utility grid power supply
- Advanced IGBT Technology
- Fully automatic self-START when WT generate and STOP
- Special design for using at high grid fluctuation area
- Wall mount and 19 inch rack mount 5U case
- Tested to comply with IEC 61727 and IEC 62116
- ISO 9001:2008 and ISO 14001 certified factory



APOLLO GWT-4500TL series is grid connected inverter that is specially designed to deliver maximum energy produced by permanent magnet generator energized by wind turbine to utility grid. The inverter converts DC output from the wind turbine controller to AC power and supplies to the utility grid. It integrates with the maximum power point tracking to extract maximum DC power generated by wind turbine. It suits for grid connected power system for wind turbine.

### **GRID CONNECTED POWER SYSTEM FOR WIND TURBINE**

## **LEONICS**<sub>®</sub>

### APOLLO GWT-4500TL series GRID CONNECTED INVERTER FOR WIND TURBINE

#### **SPECIFICATIONS**

MODEL		GWT-4500TL	GWT-4500TL/RM*
Recommend to use with input from		WTC-4500	WTC-4500/RM*
RATED POWER	DC input	5.6 kW	
	AC output	5.0 kW	
SYSTEM	Controller	Intelligent with microcomputer controlled	
	Technology	High frequency switching, IGBT technology	
DC INPUT	Operating voltage range	180 - 500 Vdc	
	Max. allowable voltage	600 Vdc	
GRID LINE	Voltage and phase	209 - 240 Vac for 230 Vac (single phase) according to standards of IEC 61727 and IEC 62116 (for MEA grid line)	
		200 - 240 Vac for 220 Vac (single phase) according to	
		standards of IEC 61727 and IEC 62116 (for PEA grid line) is optional	
	Frequency	48 - 51 Hz	
AC OUTPUT	Power factor	more than 0.98	
	Total harmonic distortion	total less than 4%, each less than 3%	
	Current limiting	110%	
EFFICIENCY	Peak efficiency	more than 95%	
CONTROL		automatic cooling fans / Unity power factor control	
PROTECTION	Input / Output	over voltage / under voltage (AC & DC), Frequency (AC)	
	Islanding	voltage and phase shift detection	
	Over heat	auto shutdown and auto restart	
	Surge energy dissipation	280 Joules 10 / 1,000 microsec wave form	
INDICATOR	LED	Operating, Main, DC, Alarm	
	LCD display	DC / AC voltage, Current, Watt, Today kWh, Accumulated kWh,	
		Calendar, Clock, Condition setting, Fault	
AUDIABLE ALARM	Multiple tone sound	mains failure, inverter fault (inhibitable)	
	with reset for silence		
COMMUNICATION	DB-9 connector	RS-232 serial interface port	
INTERFACE	RS-485 adaptor	RS-485 interface (option)	
ACOUSTIC NOISE	At 1 metre	less than 50 dBA	
ENVIRONMENT	Temperature	0 - 45°C	
	Humidity	0 - 95 % (Non - condensing)	
DIMENSION	WxHxD	48 x 57 x 20	48.5 x 22.2 x 49.7
	(approx. in cm)		
WEIGHT	Approximate in kg.	29 kg.	27 kg.
DESIGN	Tested according to	IEC 61727 and IEC 62116	
REGULATION			

\* The rack mount case models are not included the floor standing rack mount enclosure. Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

### Authorized Distributor LEO ELECTRONICS CO., LTD.

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