



### **T2000 Series 20kVA-600kVA**

With many thousands of units sold, the PHD T2000 series UPS is now legendary. Chosen by major enterprises around the world for its reliability and performance, words simply can't explain its phenomenal success. But we don't rest on our laurels, the T2000 has been modified and updated and now offers even greater performance. With a Mean Time before Failure of power to the load in excess of 20 years the T2000 is even better value for money. And with power ratings from 50kVA to 600kVA and higher, the T2000 is engineered to offer power protection sufficient to support a whole building if required. And as your power requirements grow, more T2000 units can be added, offering superb flexibility.

#### **EXPANDABLE TO PROTECT**

For genuinely redundant power protection, UPS can be installed in either active parallel or hot standby mode, ready to take over the load automatically in the event of a critical component failure. The T2000 can be configured to function in either active parallel or hot standby mode, with up to 6 units in the array. In active parallel mode, the load is balanced across all the configured units, ensuring that no single member of the array is overstressed. If a unit needs to be shut down for maintenance or repair, the remaining units in the array will rebalance the load and continue to provide uninterrupted protection. It is even possible to remove a unit from the array during an outage without affecting the load while the remaining units retain sufficient battery runtime. In hot-standby mode, one or more units support the load, while the remaining members of the array functions as standby unit. The standby unit is continually on-line, but only takes over the load when one of the primary units is no longer active. This means that there is no break when power is transferred, and the load continues to be supported without disturbance.

#### **MANUAL AND STATIC BYPASS TO PROTECT**

A manual by-pass switch allows power to be transferred directly to the mains without disturbance to the load. The UPS can then be safely powered down for maintenance or repair, on completion of the work the UPS can be powered up and the load once again transferred back to the UPS with no interruption in service. If the power demand of your equipment exceeds the overload level of the UPS the static switch defaults to the mains ensuring continuous power in the event of system abuse or short term overload conditions.

#### **TIME TO PROTECT**

In addition to providing sufficient run-time to save files and shutdown operating systems, autonomies of up to 8 hours are available allowing you the option to complete a day's work without disturbance to your

## AEC T4T with Isolation Transformer (10kVA-15kVA)

---

equipment, even during a power cut!

### **UPS MANAGEMENT SOFTWARE**

The UPS management software is installed on a server or workstation connected to each UPS via the serial port. Power failure, power restored, battery failure or eight events will be detected and the user informed. A shutdown will be initiated when the batteries are exhausted or a technical problem occurs with the UPS. The UPS management software disconnects network connections, logs out users and closes open applications (subject to app/os support) before shutting down the operating system itself.

### **SIMPLE NETWORK MANAGEMENT PROTOCOL (SNMP)**

The T2000 SNMP external agent can be located up to 5 metres away from the UPS. Initial configuration is carried out by serial comms using any suitable terminal application (e.g. Hyperterminal for Windows). The embedded HTTP server presents an HTML interface to the network, which can be accessed from any web browser. All system parameters can be configured from here, including scheduled shutdown. A sophisticated Java applet provides full monitoring in real time, along with comprehensive event and history logs.

*Full specifications can be found on the next page*

SPECIFICATIONS	ST5	ST5	ST5	ST5	ST5	ST5	ST5	ST5	ST5	ST5	ST5	ST5	ST5	
	3310	3320	3330	3340	3350	3360	3380	33100	33120	33160	33200	33300	33400	
<b>INPUT</b>														
Voltage*	380V AC ± 20% (± 25% option)													
Rectifier Frequency Range	40Hz~65Hz													
SYNC Frequency Tracking Range	50Hz ± 5% (± 10% option)													
Phase	3φ4W+PE													
Battery	12Vdc × 29 = 348Vdc													
Charge Current (Max)	5~40A (adjustable)										5~80A (adjustable)			
Charge DC Voltage Regulation	395V ± 5Vdc													
DC Ripple Voltage	<1%													
<b>OUTPUT</b>														
Capacity	10	20	30	40	50	60	80	100	120	160	200	300	400	
Phase	3φ4W+P													
Voltage*	L-N: 220/230/240VAC ±1%, L-L: 380VAC ± 1%													
Frequency	Utility normal, follow in phase automatically, Utility fault, output frequency at 50Hz ± 0.2%													
Parallel mode (optional)	None-principle-subordinate Adaptive Control Technique, User can extend parallel capacity as needed for N+1 parallel redundancy													
3 phase 100% load unbalance voltage Stability	≤2%, allows 100% unbalance													
Waveform	Sinewave THD ≤3% (linear load); <5% (non-linear load)													
Crest Factor	3:1													
Efficiency	90%													
Static Bypass Transfer Time	0ms													
Overload Capacity	110% load for 30 min,125% load for 10 min,150% load for 1min													
Regulation no load to full load steady state	±2%													
<b>OTHER</b>														
Panel Display	LCD Display indicates 3 phase input voltage, input frequency, 3 phase output voltage, load, battery voltage, battery charging and discharging etc. LED indicates running status													
Battery Self-Testing	Automatically sounds an alarm and estimates battery status in battery abnormal status													
Lightning Protection	Complies with IEC 1312													
Operating Temp, Humidity	0°C-40°C, 95% (non-condensing)													
Dimension (W x D x H) (mm)	500 x 800 x 1180						1200 x 800 x 1600				2200 x 800 x 2000			
Weight (kg)	236	296	300	355	360	435	685	785	810	995	1400	1800	2000	

\* 550V input and output systems available on request

All information contained in this brochure is purely indicative and cannot be used to form any contractual obligations. Specification or design can be changed at any time without prior notice