



# POWERHOUSE

Reliable Power Solutions

- TRUE ON-LINE DOUBLE CONVERSION TECHNOLOGY FOR ULTIMATE POWER PROTECTION

- DSP TECHNOLOGY

- PARALLEL REDUNDANCY CAPABILITY AS STANDARD

- IGBT INVERTER TECHNOLOGY

- SNMP/HTTP OPTION FOR REMOTE MANAGEMENT & INTEGRATION INTO NMS

- SMART RS232 AS STANDARD

- INTEGRATED SMARTCARD SLOT PROVIDING A CHOICE OF COMMUNICATIONS INTERFACES

- OPTIONAL SPECIALISED UPS MANAGEMENT SOFTWARE

- USER FRIENDLY LCD DISPLAY

- FAILSAFE INTERNAL BYPASS SWITCH WITH MANUAL CONTROL

- LONG RUNTIME AVAILABILITY

## T4 SERIES (10kVA-20kVA)

The T4 is a physically small On-Line UPS but retains all the features normally associated with double conversion technology. Simply put "double-conversion" is where the mains supply is rectified to a DC voltage and rebuilt into a very clean and regulated AC voltage, at all times your critical load runs from this clean no break supply.

### PARALLEL

A big advantage offered by the T4 10kVA to 20kVA is that by means of a simple cable the machines can be linked together to form a parallel N+1 system. This offers the client the opportunity to either have a fail safe system or the option to expand the power as the network grows. Up to three machines can be connected in this way making the T4 a flexible and versatile solution.

### ULTRA COMPACT

With a very small footprint you will find a ready home for the T4 in even the most hard-pressed data center. Installing such a compact free-standing UPS avoids taking up valuable rack space without significantly reducing the available floor area.

### DISPLAY PANEL

LCD display and audible alarms actively let you know if the unit is on battery, the battery charge is low, or there is an overload condition. Loading and battery information via the LCD prevent you from exceeding the UPS capacity and allow you to assess the remaining runtime before battery reserves are depleted.

### ADVANCED BATTERY MANAGEMENT

A variable boost charger ensures quick battery recharge. This means that the T4 UPS is fully prepared for duty with a minimum recovery time in the event of a power failure. Active battery management intelligently monitors the battery set with automatic battery and circuitry self-tests, this feature increases both battery life and system reliability.

### UPS MANAGEMENT

One standard management tool can be used to monitor and control all your UPS's from one central location. This means power management can now be integrated into your existing network or building management strategy. Alarms ("traps") can be configured to ensure automatic notification of events such as low battery, mains failure or overload. Two such tools can be used with the T4: Simple Network Management Protocol (SNMP) and UPS Management Software via RS232.



**STAR**

**T4 SERIES**

10kVA -20kVA



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Model	ST4100	ST4150	ST4200
Topology	True On-Line, Double Conversion		
On-battery Waveform	Pure Sine Wave		
<b>Input</b>			
Maximum Capacity (kVA/kW)	10kVA/8kW	15kVA/12kW	20kVA/16kW
Nominal Input Voltage	380VAC Three Phase (3 $\Phi$ 4W + G)		
Input Voltage Regulation	304 ~ 478 VAC		
Nominal Input Frequency	50/60 $\pm$ 4Hz		
Input PFC	$\geq$ 0.95 @ full load		
Input Short Protection	50A Circuit Breaker	100A Circuit Breaker	
<b>Output</b>			
Nominal Output Voltage	220/230/240 VAC Single Phase (1 $\Phi$ 2W + G)		
Output Voltage Regulation	$\pm$ 1%		
Output T.H.D	$\leq$ 2% THD (Linear Load), $\leq$ 6% THD(Non-Linear Load)		
Efficiency – Normal Mode	88%		
Efficiency – Battery Mode	88%		
Crest Factor	3:1		
Start on Battery	Yes		
Overload Capability (Normal Mode)	Sustaining 10 min @ 105% ~ 130% load; 1sec @ > 130% load		
Overload Capability (Battery Mode)	Shut down UPS after 10 sec @ > 150% load		
Output Frequency	50/60 Hz $\pm$ 0.05 Hz (Battery Mode)		
<b>Battery</b>			
Battery Type	Sealed Lead-Acid maintenance-free 12VDC/7Ah per cell		
Number of Batteries	40 cells	40 cells	40 cells
Typical Backup Time at Full Load	12 mins	8 mins	6 mins
Recharge Time to 90%	< 8 hours		
Charger Current (Max)	4.2A *		
Front Panel Indication – LCD	UPS Status, I/P Voltage & Frequency, O/P Voltage & Frequency, Battery Voltage, Battery Capacity, Loading %, Temperature, History Alarm.		
Front Panel Indication – LED	Normal (Green), Warning (Yellow), Fault (Red)		
Audible Alarms	Battery Mode, Low Battery, Overload, Fault		
<b>Communication Interface</b>			
Communication Port	RS232 (Standard), DB9 or USB or AS400 or SNMP / HTTP (Optional)		
UPS Dimensions (W x H x D mm)	260 x 717 x 570		
Battery Cabinet Dimensions (W x H x D mm)	260 x 717 x 570		
UPS Weight (kgs)	39	55	55
Battery Cabinet (w/battery) (kgs)	143	143	143
Total Weight (kgs)	182	198	198

\* All T4 models can have up to 25A charging capabilities when connected in parallel with the ST-CHARGER external super charger.

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