

Hercules Combo Series

SYNDOME
ผู้นำด้านระบบสำรองไฟฟ้า

**HIGH PERFORMANCE
TRUE DOUBLE CONVERSION ONLINE UPS
With Dual input (3 phase or 1 phase)**

*Trendy & Elegant LCD & LED Design
for real-time UPS system information*



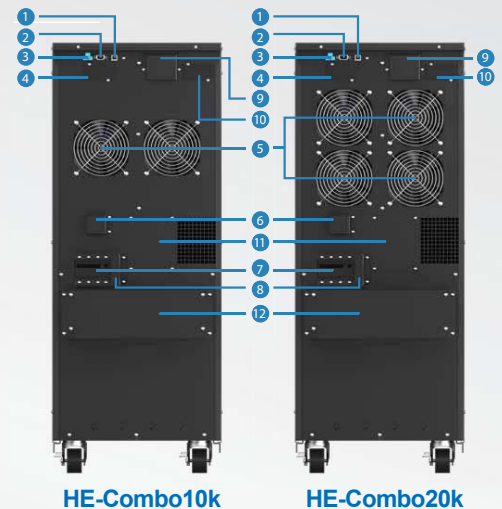
Features

- DSP Control
- 0.9 Output Power Factor
- Wide Input Range
- High Efficiency Mode (ECO)
- Frequency Converter Mode
- Input THDI < 5%
- Output THDv < 2%
- Dual input (3 phase or 1 phase auto detection)
- Bypass and Emergency Power Off or Automatic Shutdown when no load/low DC voltage
- Feedback protection
- Output Voltage Regulation < 1%
- N+X Parallel Redundancy
- Dot Matrix LCD Display
- Extendable Run Time
- Fan Speed Control
- Free Power Management Software
- Industrial Grade
- Optional SNMP



Rear Panel:

1. USB Port
2. RS232 Port
3. EPO
4. AS400 Slot
5. Fan
6. Back Feed Connector
7. Input Breaker
8. Neutral Switch
9. Parallel Port (Optional)
10. Intelligent Slot
11. Maintenance Switch
12. Terminal Block (Input/Output/Battery)



Hercules Combo series, built for the most reliability, purity and power

Hercules Combo Series UPS make use of the unique True Online Double Conversion circuitry to detect the electricity current and voltage output of utility power supply. The current is input via high frequency PWM to maintain uniform wave form and phase in line with the voltage, so as to attain high input power factor over to 0.99 and avoid generating comparatively significant harmonic interference on the power network.

With the use of the outstanding IGBT as the power conversion component, the operating frequency of the Inverter of UPS is capable of reaching tens of KHz, due to the high frequency operating characteristics of IGBT. Higher working efficiency of the inverter also improves the overall efficiency of UPS and higher inversion frequency reduces the noise of the inverter as well. Excellent unique design for dual input utility (3 phase or 1 phase auto detection), the best for your utility choices of flexible.

Product Information

Hercules Combo Series



MODEL		HE-Combo10k	HE-Combo20k
CAPACITY	VA/WATT	10kVA/8kW (PF0.8)	20kVA/16kW (PF0.8)
INPUT	Voltage Range	110 - 276 VAC(220 ± 20%) for 1 phase input, 190-478VAC (380 ± 20%) for 3 phase input	
	Frequency Range	45-55Hz / 54-66Hz/50/60Hz	
	Phase	Three Phase with ground or Single phase with ground	
	Current THDI	<5%	
	Power Factor	≥ 0.99	
	Generator Input	1.5 x UPS Rating Power	
OUTPUT	Voltage Range	208VAC/220VAC/230VAC/240VAC (± 1%)	
	Phase	Single phase with ground	
	Frequency (Synchronized Range)	45-55Hz/54-66Hz/50/60Hz	
	Frequency (Battery Mode)	50/60Hz ± 0.05Hz	
	Current Crest Ratio	3:1	
	Harmonic Distortion	<= 2% THD (Linear Load)	
	Protection	Overload and Short Circuit Protection	
	Output Waform	Pure Sinewave	
	Outlet	Terminal Block	
	Overload Capacity	Line Mode Battery Mode	5 min @ 100%~110% ; 1 min @ 110% ~ 130% ; 10s @ 130% ~ 150% ; 2 sec @ > 150%
EFFICIENCY	Line Mode/BAT Mode	> 93% @Full Load	
	ECO mode	> 97% @Full Load	
BATTERY	Number of Batteries Per Set	24	
	Battery Capacity (Ahr)	12V/(7/9)Ahr	
	Backup Time (depend on load)	>15 min(Full Load 10 min)	
	Recharge Time (to 90%)	3 Hours	
	Charging Current (Max.)	2.0A, 4.0A (Expandable to 8.0A)	
	Rated Battery Voltage	288 Vdc	
	Battery Type	Rechargeable ,Sealed Lead Acid Maintenance Fee	
TRANSFER TIME	AD to DC	Zero	
Parallel	N+X Parallel Redundancy	Max 4 (Load Sharing)	
INDICATOR	LCD & LED 15	For LED: Bypass mode,UPS on,Line mode,Battery Mode, HE mode,Battery test mode,Fault mode,Waring mode For LCD: Input/Output Voltage&Frequency, Load level,Load Watt,Battery Voltage,Battery status,Converter mode, UPS status, Fault indicator, etc.	
AUDIBLE ALARM	Battery Mode	Sounding every 4 seconds	
	Low Battery	Sounding every second	
	Overload	Sounding twice every second	
	Fault	Continuously Sounding	
DIMENSION	W x H x D mm	350 x 89 x 650	
WEIGHT	kg	58 ex.bat	62 ex.bat
ENVIRONMENT	Operating Environment	0-45° C	
	Relative Humidity	0-95% (NON-CONDENSING)	
	Noise Level	<55dB @ 1 Meter	
INTERFACE	USB (built-in) / RS-232	Software supports Windows Family, Linux, Sun Solaris, IBM AIX, Compaq True64, SGI IRIX, FressBSD, HP-UX and MAC	
	Smart Slot (Option)	SNMP Adapter/ AS400 Relay Card / RS485 / USB	
INTERNATIONAL STANDARDS	CE	Safety (IEC/EN62040-1-1), ESD (IEC/EN61000-4-2 L4),RS (IEC/EN61000-4-3 L3),EFT (IEC/EN61000-4-4 L4), Surge (IEC/EN61000-4-5 L4),EN50091, Conduction (IEC/EN62040-2 C3), Radiation (IEC/EN62040-2 C3), Transportation (ETS300019-2-2 Class 2.3), Protection (IP20 static) ,UL,TIS 1291-2553	

Specification are subject to change without prior notice.



มาตรฐาน 1291 1291.1 - 2553
มาตรฐาน 1291 1291.2 - 2553
มาตรฐาน 1291 1291.3 - 2555



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