

UPS TRIMODFLEX



Módulos de poder flexibles

- 10-15-20-25-30 y 50KVA

Diseño full Modular

- El concepto de modularidad aplicado a todos los componentes del sistema; módulos de poder, módulo de monitoreo, módulo de bypass, módulo de distribución de energía y módulos de baterías. Más aún, los módulos de baterías se dividen en cartridge de 10 unidades.
- Los módulos de poder, bypass, monitoreo y baterías son Hotswapp.

Alta disponibilidad

- Amplio rango de voltaje de operación 138-485V
- Bus de comunicaciones y control redundante, para no afectar el funcionamiento del equipo ante posibles fallas de algún bus.
- La falla o extracción de un módulo de potencia, de control o de monitoreo no afectará el correcto funcionamiento de la UPS.

Administración Inteligente

- Pantalla touch de 7 pulgadas.
- Grabación y exportación de historial de logs de fallas y registros.
- Soporta RS485, SNMP, tarjeta de contacto seco, interface RJ45 y CAN.

Trifásicas de 10 a 300KVA

Eficiencia

- Factor de potencia de entrada 0.99
- Factor de potencia de Salida 1.0
- Topología de 3 niveles, con una eficiencia de hasta 96%
- Distorción armónica THDi<3% (cargas lineales), THDi<5% (50% cargas no lineales)
- Modo de Inactividad programable: cuando el nivel de carga es muy bajo, algunos módulos de poder pasan a modo de inactividad, alternando la carga entre los módulos para balancear los tiempos de operación entre ellos, de esta forma se maximiza la vida útil del sistema.

Capacidad de Paralelismo

- Capacidad de paralelizar hasta 6 unidades
- Las unidades en paralelo pueden compartir bancos de batería

Flexibilidad en Baterías

- Gran flexibilidad de operación en baterías: String entre 30 y 50 baterías de 12V.
- Cargador de gran potencia permite soportar largos tiempos de autonomía.
- 3 métodos de carga inteligente.

ESPECIFICACIONES TECNICAS (Módulos de 10 a 30 KVA)

Model	TRIMODFLEX-60	TRIMODFLEX-150	TRIMODFLEX-300
UPS cabinet	30k~60k / 30k~60k	30k~150k / 30k~150k	30k~300k / 30k~300k
Max. Number	2+1 / 2+2(optional)	5 / 4	10 / 9
Module	HPM3300E-RM-30 (30k / 30k)		
Model	TRIMODFLEX-50	TRIMODFLEX-125	TRIMODFLEX-250
UPS cabinet	25k~50k / 25k~50k	25k~125k / 25k~125k	25k~250k / 25k~250k
Max. Number	2+1 / 2+2(optional)	5 / 4	10 / 9
Module	HPM3300E-RM-25 (25k / 25k)		
Model	TRIMODFLEX-60	TRIMODFLEX-100	TRIMODFLEX-200
UPS cabinet	20k~60k / 20k~60k	20k~100k / 20k~100k	10k~200k / 10k~200k
Max. Number	3 / 3+1(optional)	5 / 4	10 / 9
Module	HPM3300E-RM-20 (20k / 20k)		
Model	TRIMODFLEX-45	TRIMODFLEX-75	TRIMODFLEX-150
UPS cabinet	15k~45k / 15k~45k	15k~75k / 15k~75k	10k~150k / 10k~150k
Max. Number	3 / 3+1(optional)	5 / 4	10 / 9
Module	HPM3300E-RM-15 (15k / 15k)		
Model	TRIMODFLEX-30	TRIMODFLEX-50	TRIMODFLEX-100
UPS cabinet	10k~30k / 10k~30k	10k~50k / 10k~50k	10k~100k / 10k~100k
Max. Number	3 / 3+1(optional)	5 / 4	10 / 9
Module	HPM3300E-RM-10 (10k / 10k)		

INPUT

Nominal voltage	380/400/415Vac, (3Ph+N+PE)
Operating voltage range	138~305Vac for 40% Load; 305~485Vac for 100% Load;
Operating frequency range	40Hz~70Hz
Power factor	≥0.99
Harmonic distortion (THDI)	3% (100% linear load)
Bypass voltage range	Max. voltage: 220V: +25%(optional+10%,+15%,+20%); 230V: +20%(optional+10%,+15%); 240V: +15%(optional+10%) Min. voltage: -45% (optional-10%, -20%, -30%)
Bypass Frequency range	Frequency protection range: ± 10%
Generator input	Support
Power work in	Support
Backfeed protection	Support

OUTPUT

Rated voltage	380/400/415Vac, (3Ph+N+PE)
Power factor	1.0
Voltage regulation	± 1%
Output frequency	± 1% / ± 2% / ± 4% / ± 5% / ± 10% of the rated frequency(optional)
Line Mode Bat. Mode	(50/60 ± 0.1%)Hz
Crest factor	3:1
Harmonic distortion (THD)	≤2% with linear load; ≤4% with nonlinear load
Efficiency	UP to 96 %

BATTERY

Battery voltage	Optional Voltage: ± 180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs optional)360Vdc~600Vdc (30~50 pcs), 36 pcs default, 36 and 50 pcs fully output; 32~34 pcs output power factor 0.9; 30 pcs output power factor 0.8)
Power module Charge Current	18A (Max.)
UPS cabinet Max. Charge Current	54A/72A
	90A/72A
	180A/162A

SYSTEM FEATURES

Transfer time	Utility to Battery : 0ms; Utility to bypass: 0ms
Overload	110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min 135% overload for long term; >1000% overload for 100 ms
Overheat	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately
Low battery voltage	Alarm and Switch off
Self-diagnostics	Upon Power On and Software Control
EPO	Support
Battery	Advanced Battery Management
Noise suppression	Complies with EN62040-3
Audible & Visual alarms	Line Failure, Battery Low, Overload, System Fault
Status LED & LCD display	Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault
Reading on the LCD display	Input, Output, Battery, Command, Setting, Maintenance
Communication interface	CAN,RS485,Parallel, Dry contact port, Relay card(optional), SNMP card(optional),Battery temperature sensor(optional)

ENVIRONMENTAL

Operating temperature	0°C ~ 40°C
Storage temperature	-25°C ~ 55°C
Humidity range	0 ~ 95% (non condensing)
Altitude	< 1500m
Noise level(from 1M distance)	<58dB
	<61dB
	<68dB

PHYSICAL

Dimension	UPS cabinet	600x2000x 1000	600x2000x 1000
W × HxD (mm)	Power module	440x86 (2U)x620	
	UPS cabinet	142	153
Net weight (kg)	Power module		295
		10kVA: 19 Kg ; 15~30kVA: 21Kg	

STANDARDS

Audible & Visual alarms	IEC/EN62040-1,IEC/EN60950-1
EMC	IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4,IEC61000-4-5,IEC61000-4-6,IEC61000-4-8, EN6240-3

ESPECIFICACIONES TECNICAS (Módulos de 50 KVA)

MODEL		TRIMOD150	TRIMOD200	TRIMOD250	TRIMOD300	TRIMOD400	TRIMOD500	TRIMOD600	TRIMOD800	TRIMOD1000	
Capacidad (VA/Watts)	Gabinete UPS	150k / 150k	200k / 200k	250k / 250k	300k / 300k	400k / 400k	500k / 500k	600k / 600k	800k / 800k	1000k / 1000k	
	Mód.Potencia	50k/50k									
	Modulo Max.	3	4	5	6	8	10	12	16	20	

INPUT

Nominal voltage	380/400/415Vac, (3Ph+N+PE)
Operating voltage range	138~305Vac for 40% Load; 305~485Vac for 100% Load;
Operating frequency range	40Hz-70Hz
Power factor	≥0.99
Harmonic distortion (THDI)	≤ 3% (100% linear load)
Bypass voltage range	Max. voltage:220V: +25%(optional +10%,+15%,+20%) ; 230V: +20% (optional +10%,+15%) ;240V: +15%(optional +10%) Min. voltage: -45% (optional -10%, -20%, -30%)
Bypass Frequency range	Frequency protection range: ±10%
Generator input	Support

OUTPUT

Rated voltage	380/400/415Vac, (3Ph+N+PE)
Power factor	1
Voltage regulation	±1%
Output frequency	Line Mode: ±1%/±2%/±4%/±5%/±10% of the rated frequency(optional) Bat. Mode: (50/60±0.1%)Hz
Crest factor	3:1
Harmonic distortion (THDv)	≤2% with linear load ≤4% with non linear load
Efficiency	96%

BATTERY

Battery voltage	Optional Voltage: ±180V/±192V/±204V/±216V/±228V/±240/±252/±264/ ±276/±288/±300Vdc(30/32/34/36/38/40/42/44/46/48/50pcs optional); 360Vdc~600Vdc (30~50 pcs, 30 pcs default, 36~50 pcs output power factor 1.0; 32~34 pcs output power factor 0.9; 30 pcs output power factor 0.8);									
Battery type	VRLA, lithium battery									
Charging Current(A)	UPS cabinet	60A (Max.)	80A (Max.)	100A (Max.)	120A (Max.)	160A (Max.)	200A (Max.)	240A (Max.)	320A (Max.)	400A (Max.)
Power module		20A (Max.)								

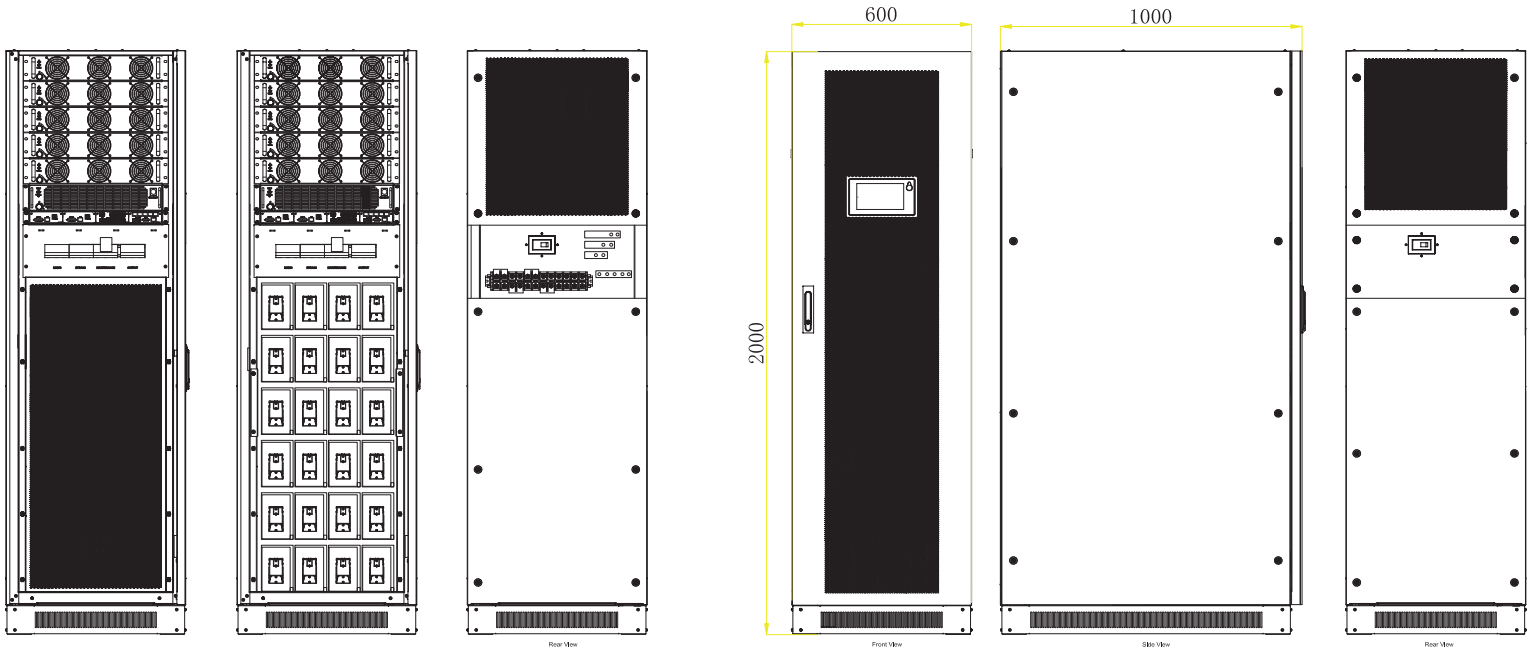
SYSTEM FEATURES

Transfer time	Utility to Battery : 0ms; Utility to bypass: 0ms									
Overload	Line Mode	≤110% overload 60 min; ≤125% overload 10 min; ≤150% overload 1 min to Bypass								
	Bypass Mode	135% overload for long term; >1000% overload for 100 ms								
Overheat	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately									
Low battery voltage	Alarm and Switch off									
Self-diagnostics	Upon Power On and Software Control									
Backfeed protection	Support									
EPO	Shut down UPS immediately									
Battery	Advanced Battery Management									
Noise suppression	Complies with EN62040-3									
Audible & Visual alarms	Line Failure, Battery Low, Overload, System Fault									
Reading on the LCD display	Input, Output, Battery, Command, Setting, Maintenance									
Life cycle	15 years									
Heat emission	Watt/h	6750	9000	11250	13500	18000	22500	27000	36000	45000
Full load	BTU/h	23038	30717	38396	46075	61433	76792	92150	122867	153584
Communication interface	BMS, RS485, LBS, Parallel, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)									

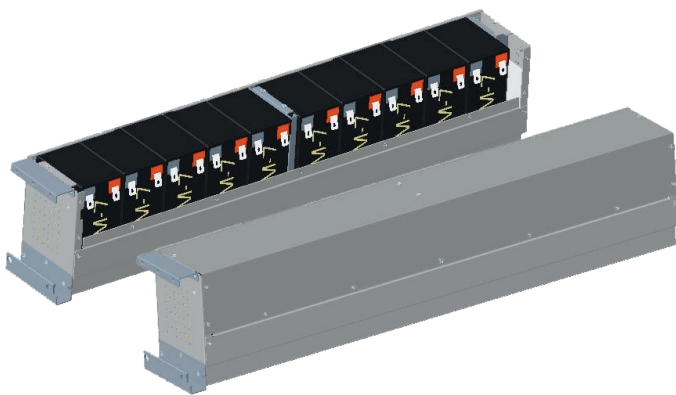
ENVIRONMENTAL

Operating temperature	0°C~40°C									
Storage temperature	-25°C~55°C									
Humidity range	0~95% (non condensing)									
Altitude	< 1500m. When >1500m, derating									
Noise level(from 1M distance)	<62dB	<63dB	<65dB	<68dB	<70dB	<70dB	<70dB	<70dB	<73dB	<73dB

Layout de UPS y medidas



Cartridge de Baterías



Pantalla Touch de 7"

