Online 3ph/3ph - 3ph/1ph

OPTIMA-33-RT10 05K TO 20K

Online de Doble Conversion UPS with Output PF 1.0 and IGBT technology in rectifier and inverter stages. Three-Phase Input and Output, Output can be configured as Single-Phase. Designed to offer the best protection to critical systems requiring a high level of power protection and high operational availability. Dual installation Rack & Tower, simply the best choice for any application.



Available for Three-Phase: 208, 400, and 480V Installations
Three-Phase Input and Output (3 Phases + Neutral + Ground) and models to operate in 208/120V (05K to 20K) and 400/230V (10K to 20K) systems.

Flexibility & Versatility
Standard UPS Output can be configured to operate as Single-Phase, turning these 3/3 UPS into 3/1 UPS. This setting is reserved for XMART Technical Service.

IGBT + ON-LINE Doble Conversion Technology
New generation On Line Doble Conversion Technology offers high reliability and strength as well as outstanding features. DSP signal control system and an efficient rectifier/inverter system based in IGBT technology give exceptional attributes to this product family and an input power factor over 0.99 at full load.

Touch Screen
From this versatile 3.5 inches color touch screen LCD, all UPS parameter, as well as AC Line conditions, can be monitored. It is also a very intuitive interface to set up all configurable functions of this avant-garde unit.

Communication (USB - RS232 - SNMP) & Software de Control
Several communications options are available: USB, RS232 and Smart SNMP port. Smart SNMP port supports LAN cards, RS485 cards, or dry contact cards (AS400).

Multiple Bypass System
Includes an internal automatic bypass which activates if UPS fails or gets overloaded. This keeps the system powered and working while the situation is solved. Besides, UPS includes control port for external bypass switch for major maintenance.

Eco-Mode Operation, for power saving
ECO-Mode is a power saving function which reduces electrical consumption over 5%. In this mode the load is powered directly by AC Line as long as it keeps between pre-configured limits. Otherwise, the UPS goes to regular ONLINE mode. During power outage, the UPS goes into Battery Mode to keep your equipment working perfectly safe.

Conformal Coating
This XMART equipment features a Conformal Coating treatment on its internal boards and components. Conformal coating is a protection against moisture and corrosive contaminants to ensure stable performance and extend its lifespan in various environments, as long as technical specifications requirements of the equipment are met.

Parallel Operation
Up to 4 units can be installed in parallel either to grow in capacity or for redundancy purposes (N+1). 2 UPS in parallel systems can operate either with one shared battery pack, or with separate battery packs, according to installation requirements.

Emergency Power Off (EPO)
EPO port to connect an emergency switch which turns off the UPS output when activated.

High Energy Efficieny
One of the main features of this family is high energy efficiency (>94%). This generates high operational savings and contributes with the environment.

Expandable Backup
External battery packs (as many as you need) can be connected to this UPS to offer longer backup.

Power Generators Compatible
Only True On-Line Double conversion UPS can filter voltage fluctuation and other particularities generated by Power Generators to generate a clean, perfect, and pure sine wave power to feed your installation.

Smart Battery Charger
With a smart battery charger this UPS family can charge batteries in an outstading time (2-4 hours up to 90%), offering a better availability than similar products. A smart 3 stages charging algorithm, along with temperature compensation improves battery lifespan.

Applications: IT Systems, Industrial Installations, etc.

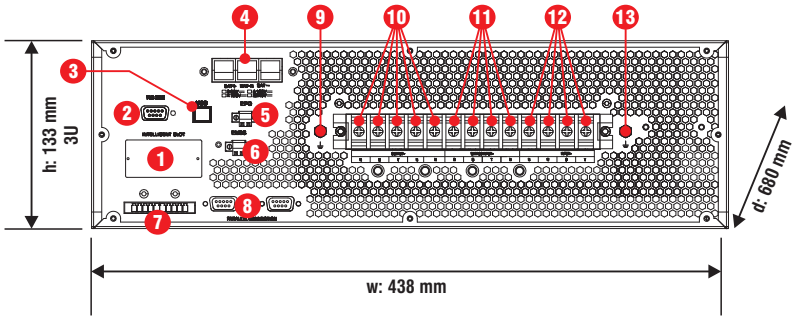


Technical Features / Características Técnicas

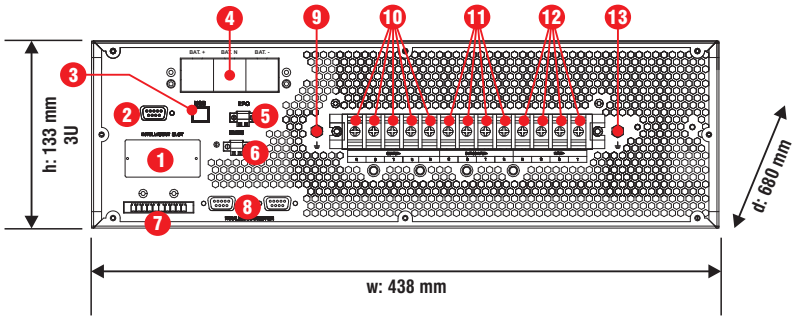
1.- SNMP Smart Port
2.- RS232 Port
3.- USB Port
4.- External Battery Connector
5.- EPO Connector Off)
6.- External Maintenance Bypass Switch Port
7.- Shared Current Connectors
8.- Parallel Control Connectors
9.- Input Ground Terminal
10.- AC Output Terminals
11.- Bypass Input Terminals
12.- AC Input Terminals
13.- Output Ground Terminal

Rear View / Vista Trasera

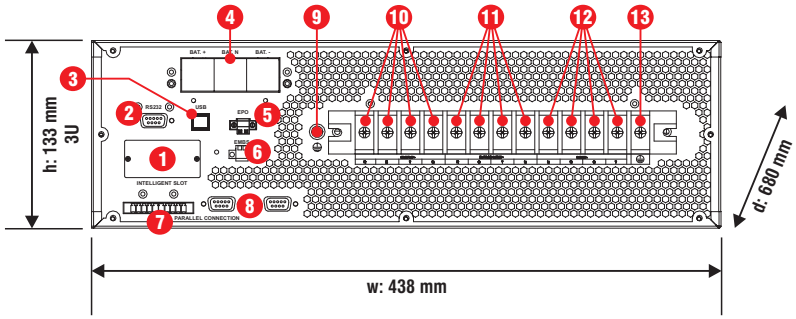
OPT-33-RT10 10K (400V/230V)
OPT-33-RT10 05K (208V/120V)



OPT-33-RT10 15K & 20K (400V/230V)
OPT-33-RT10 10K (208V/120V)



OPT-33-RT10 20K (208V/120V)



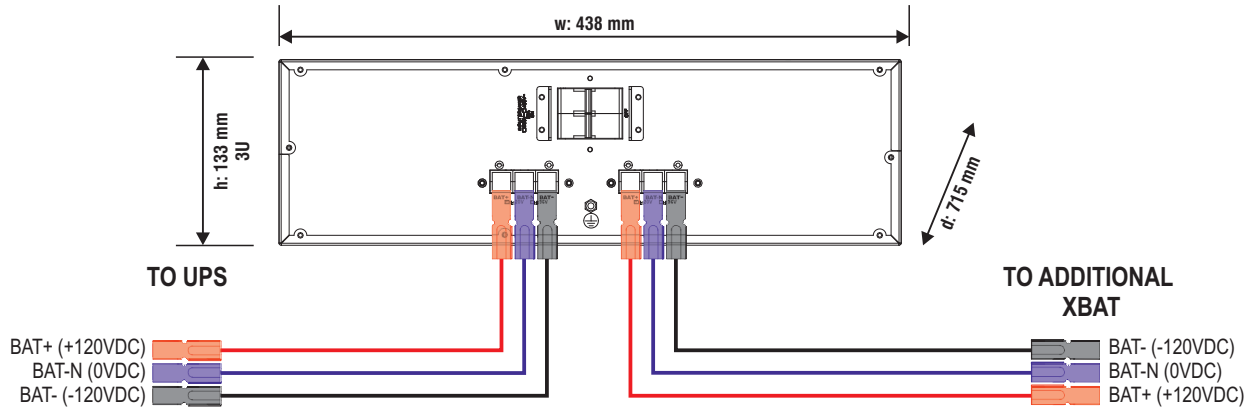


Technical Features / Características Técnicas

XBAT - External Battery Packs / Paquetes de Baterías Externas

XBAT-OPT33-RT-2x120V-H (20 batteries 12V/9AH)

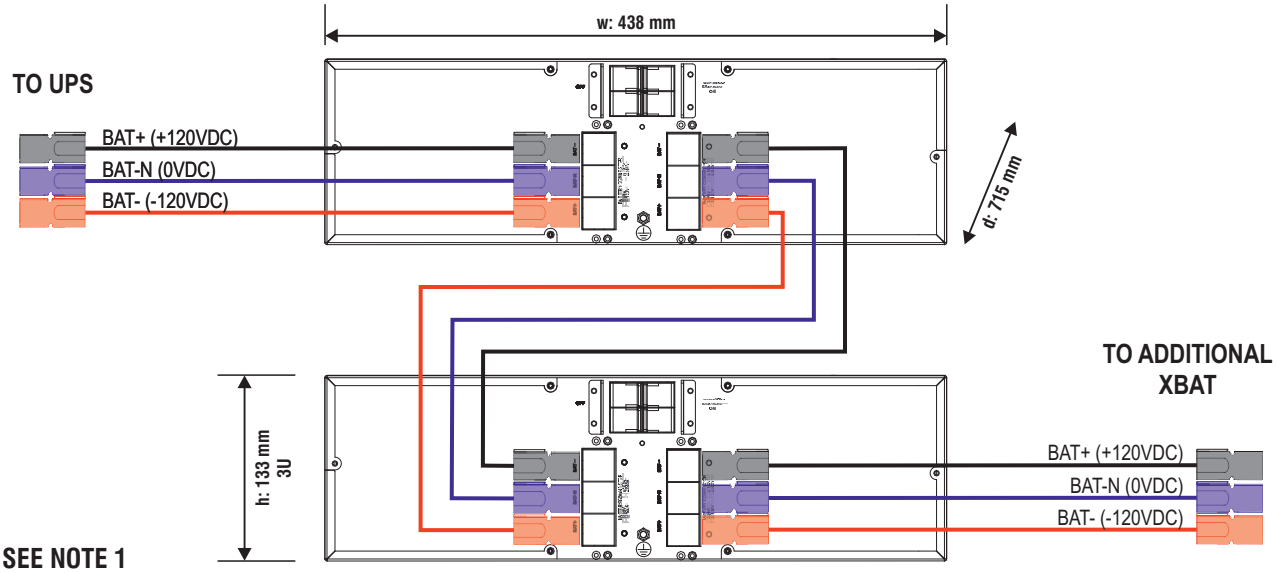
XBAT Array For:
OPTIMA-33-RT10-05K-208V
OPTIMA-33-RT10-10K-208V
OPTIMA-33-RT10-10K-400V



SEE NOTE 1

XBAT-OPT33-RT-2x120V-V (20 batteries 12V/9AH)

XBAT Array For:
OPTIMA-33-RT10-20K-208V



SEE NOTE 1

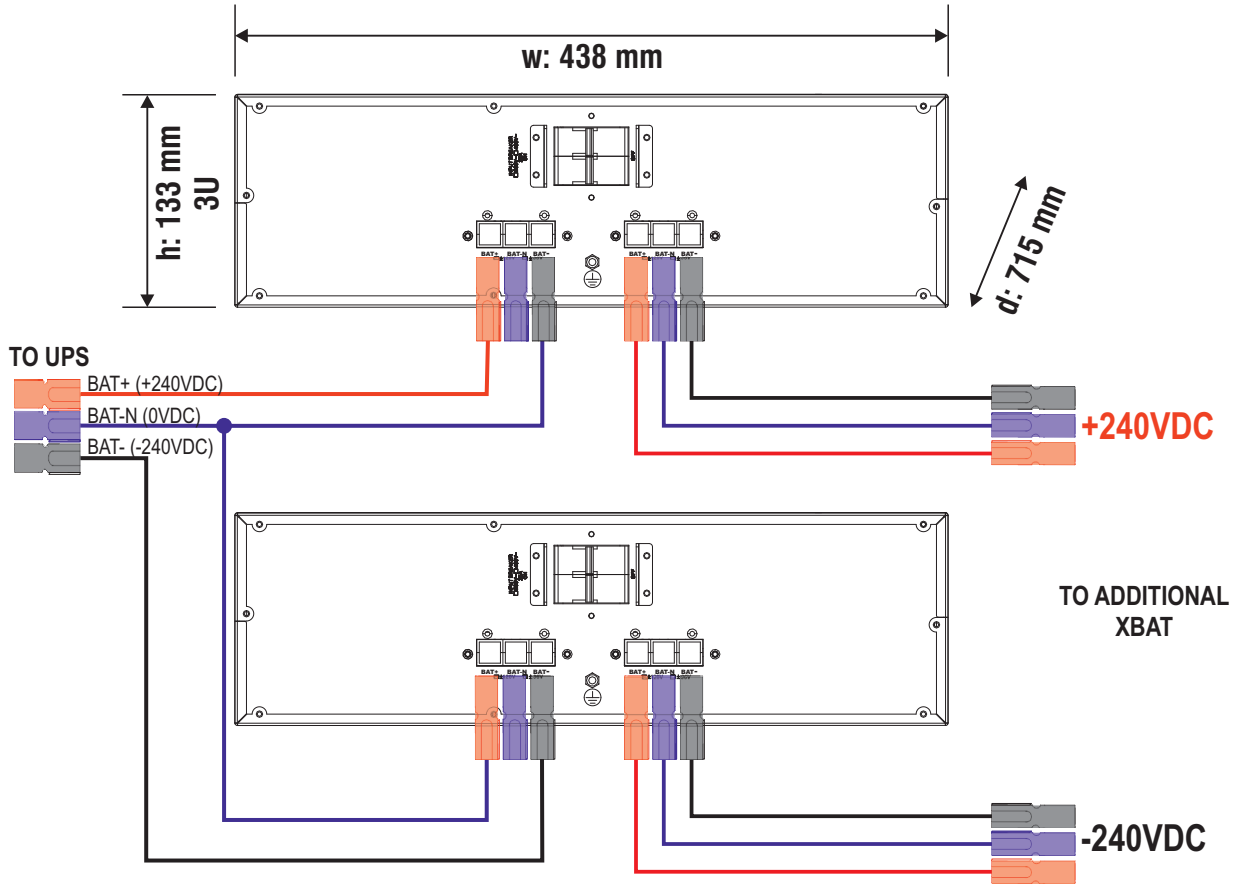
NOTE 1: DC cables are either included with UPS or with XBAT. All details, including Part Numbers, are clearly described in User Manual for **OPTIMA-33-RT10** family

Rear View / Vista Trasera

External Battery Packs / Paquetes de Baterías Externas

XBAT-OPT33-RT-2x120V-H (20 batteries 12V/9AH)

XBAT Array For:
OPTIMA-33-RT10-15K-400V
OPTIMA-33-RT10-20K-400V



SEE NOTE 1

NOTE 1: DC cables are either included with UPS or with XBAT. All details, including Part Numbers, are clearly described in User Manual for **OPTIMA-33-RT10** family

Applications: IT Systems, Industrial Installations, etc.

Technical Features / Características Técnicas — 400V/230V (1/2)

OPTIMA-33-RT10 (400/230V) Page 1 of 2	10K-400-NB	15K-400-NB	20K-400-NB
Capacity / Capacidad (VA)	10KVA/10KW	15KVA/15KW	20KVA/20KW
Parallel Units / Unidades en Paralelo	4		
Installation / Instalación	Rack & Tower / Rack y Torre		
Input-Output / Entrada-Salida	3Ph-3Ph (3ph-1ph Configurable)		
INPUT / ENTRADA			
Phase / Fases	(Y) : 3Ph + N + G		
Input Range / Rango de Entrada			
Max. Current / Corriente Max. (130% load, A x ph.)	25A	37A	50A
Frequency Range / Rango de Frecuencia	Autosensing: 50Hz: (46-54Hz) / 60Hz: (56-64Hz)		
Power Factor / Factor de Potencia			
THDi (IEC 62040-3)			
Slew Rate / Seguimiento de Frecuencia:	1 Hz / s		
OUTPUT / SALIDA			
Phase / Fases	(Y): 3Ph + N + G or (DELTA): 3Ph +G or (Configurable): 1Ph + N + G		
Voltage / Tensión de Salida	360/208Vac - 380/220Vac - 400/230Vac - 415/240Vac - 230Vac Configurable (*N1)		
Voltage Regulation / Regulación de Salida:	+/- 1%		
Max. Angle Deviation / Max. Desviación de Fase	2° (EN-62040-3)		
Max. Voltage Unbalance Ratio / Desbalance Max.	1% (EN-62040-3)		
Frequency / Frecuencia (Batt. Mode)	50 Hz +/- 0.1 Hz / 60 Hz +/- 0.1 Hz		
Current Crest Ratio / Factor de Cresta			
THDv (IEC 62040-3)			
Dynamic Accuracy / Regulación Carga Variable	6% (load variations 0%-100% & 100%-0% R Load)		
Transient Recovery / Recuperación Cambio Carga	100ms / 90% vs (0%-100% & 100%-0% R load)		
Transfer Time / Tiempo de Transferencia:	0 ms		
Waveform / Forma de Onda	Sine Wave / Sinusoidal Pura		
Power Output / Salidas	Terminal Block / Regleta de Conexión		
DC Offset / Componente DC	+/-50mV max.		
INTERNAL BYPASS			
Bypass type / Tipo de Bypass:	SCR board / Tarjeta SCR		
Input Range in Bypass / Rango entrada en Bypas:	176-264Vac (L-N) & 50/60 +/- 4Hz Freq.		
PROTECTION SYSTEMS / SISTEMAS DE PROTECCION			
Surge & Spikes Suppression / Supresión de Picos	(L-N: 1.490J) + (LG: 1.490J) + (N-G: 490J) = TOTAL=3.470J (10/1000us)		
Output Short-Circuits / Cortocircuitos a la Salida (ONLINE)	Electronic inverter shortcircuit protection / Protección del inversor contra cortocircuitos: <100ms: Current limited to max. capacity / Corriente limitada al 100% de Capacidad >=100ms: Output shutdown. UPS in Fault Mode / Salida se apaga. SAI/UPS en Modo Falla		
AC Input Current / Sobre-Corriente de Entrada AC	Input breaker or fuse / Disyuntor o fusible de entrada		
Battery overcurrent / Sobrecorriente de baterías	Internal Fuse protection in battery line / Protección por fusible interno en línea de baterías		
Phase rotation / Fases de entrada intercambiadas	Alarm & turn-on disable / Alarma y encendido inhabilitado		
Repetitive Overloads / Overloads repetitivos	3 overloads in 30min =UPS locks in bypass / 3 overloads en 30min = UPS a bypass		
Starting Time / Tiempo de Arranque			
EFFICIENCY / EFICIENCIA			
Eco Mode (100%/50% load)	98,5% / 98.0%		
AC Mode / Modo AC (100%/50% load)	94,8% / 95.5%		
Battery / En Batería (100%/50% load)	93.8% / 94.5%		
Inverter Efficiency / Eficiencia Inversor			
OVERLOAD / SOBRECARGA			
AC Mode / Modo Normal	[100%-110%: 60m] [110%-125%: 10m] [125%-150%: 1m] [>150%: 0.4s] to bypass		
Battery Mode / Modo Batería	[100%-110%: 60m] [110%-125%: 10m] [125%-150%: 1m] [>150%: 0.4s] to Cut-Off		
Bypass	[100%-130%: OK] [>130%: 1min]		

Technical Features / Características Técnicas 400V/230V (2/2)

OPTIMA-33-RT10 (400/230V) Page 2 of 2	10K-400-NB	15K-400-NB	20K-400-NB
BATTERIES / BATERIAS			
Battery Type / Tipo de Baterías	VRLA Sealed & Free maintenance / Sellada de libre mantenimiento VRLA (12V-9AH)		
Batteries location / Ubicación de las Baterías	External (XBAT) / Externas (XBAT)		
Battery Voltage / Voltaje de Baterías	+/- 120 Vdc	+/- 240 Vdc	
Charging Amps / Corriente de Carga	1A - 12A Configurable (According to/ De acuerdo con DIN41773)		
Recharging Time / Tiempo de recarga (90%)	According to Battery Array / Según el arreglo de baterías usado (*N2)		
Charging Voltage / Voltaje del cargador (Floating)	+/- 136.5 Vdc	+/- 273 Vdc	
Temp. Compensation / Compensación Temp.	20mV/ºC per battery (Input Air Temp/ Temp. Aire entrada: 25-50ºC)		
Shutdown battery Voltage / Voltaje DC Apagado	10.7Vdc/batt		
Low Battery Warning / Aviso de Baterías Baja	11.4Vdc per Battery		
Max. DC Current / Corriente DC Max. (150% load)	140A	105A	140A
INDICATORS / INDICADORES			
3.5 Inches Touch Screen / Pantalla Táctil de 3.5 Pulgadas	Full Status, Error Codes, & Real Time Values Estado, Códigos de Error y Valores en Tiempo Real		
ALARM / ALARMAS			
Acoustic Beep Alarm / Alarma sonora:	Battery Mode, Low Battery, Overload, UPS Failure Modo Batería, Baja Batería, Sobrecargas, Falla		
PRODUCT SIZE & NET WEIGHT / TAMAÑO Y PESO NETO (DxWxH) / (mm) / (Kg)			
SIZE: UPS (no internal batteries)	680*438*133 (3U)		
WEIGHT: UPS (no internal batteries)	26	28	28
SIZE: Ext. Batt Pack / Baterías Externas	606*438*133 (3U)		
WEIGHT: Ext. batt Pack / Baterías Externas	67		
PACKING: Individual Small Pallet per Unit / EMPAQUE: Equipo en Pallet Individual (DxWxH) / (mm) / (Kg)			
SIZE: UPS	870*580*250		
WEIGHT: UPS	30	32	32
SIZE: Ext. Batt Cab. / Baterías Externas	870*580*250		
WEIGHT: Ext. batt Cab. / Baterías Ext.	74		
OPERATING / AMBIENTALES			
Operating Conditions / Condiciones de Operación	(0 to +40ºC) (*N3) <95 % (non-condensing / no condensante)		
Storage Temperature/ Temperatura de Almacenaje	-15 ºC to +60 ºC		
	<62	<65	<65
Protecting Coating / Tropicalizado de Tarjetas	Yes / Si		
Altitude / Altura	Max Altitude: 4.500m. (over 1.000m output capacity is de-rated 1% every 100m) Altura máx 4.500msnm (sobre 1.000m la capacidad de salida disminuye 1% cada 100m)		
COMMUNICATION / COMUNICACION			
Smart RS-232 & USB ports	Built-In, Supports / De fábrica, soporta: Windows family, Linux, Unix and MAC		
Smart Port (SNMP)	Optional / Opcional: LAN, AS400 & RS485		
SAFETY & STANDARDS / NORMATIVAS Y ESTANDARES			
CE Directives	IEC 62040 - 1		
UPS General Safety / Seguridad General	IEC 62040 - 1		
UPS EMC / Compatibilidad. Electromag.	IEC 62040 - 2 (Class C3)		
UPS Tests / Procedimiento Pruebas UPS	IEC 62040 - 3		
ESD / RS / EFT / Surge / CS / F. Mag. Field	IEC / EN 61000 - 4-2 & 4-3 & 4-4 & 4-5 & 4-6 & 4-8		
Low Frequency Signals	IEC / EN 61000 - 2 - 2		
Degree of protection / Grado de Protección	IP20		
Conduction & Radiation	IEC / EN 62040-2 (Cat 3)		
Quality and Enviroment	RoHS / ISO9001 & ISO14001		
Transportation / Transporte	ETS 300019 - 2 - 2 class 2.3		

Specifications can be modified to comply with special requirements. Technical specifications may change without further notice

Las especificaciones pueden bajo requerimiento adaptarse a proyectos especiales y pueden cambiar sin previo aviso.

(*N1): **Output voltage selectable by Screen. Capacity derrated to 90% for 360/208V** / Voltaje de salida configurable desde LCD. Cap. disminuida a 90% para 360/208V

(*N2): **Recharging time based on previous 10min to 20min full discharging cycles** / Tiempo de recarga basado en ciclos previos de descarga profunda de 10 a 20min.

(*N3): **UPS can work up to 40ºC but batteries short their life over 25ºC** / El UPS puede trabajar hasta los 40ºC, pero las baterías acortan su vida útil por encima de 25ºC

Applications: IT Systems, Industrial Installations, etc.

Xmart by Integra

Technical Features / Características Técnicas

208V/120V (1/2)

OPTIMA-33-RT10 (208/120V) Page 1 of 2	5K-208-NB	10K-208-NB	20K-208-NB
Capacity / Capacidad (VA)	5KVA / 5KW	10KVA / 10KW	20KVA / 20KW
Parallel Units / Unidades en Paralelo	4		
Installation / Instalación	Rack & Tower / Rack y Torre		
Input-Output / Entrada-Salida	3Ph-3Ph (3ph-1ph Configurable)		
INPUT / ENTRADA			
Phase / Fases	(Y) : 3Ph + N + G		
Input Range / Rango de Entrada			
Max. Current / Corriente Max. (130% load, A x ph.)	25A	50A	99A
Frequency Range / Rango de Frecuencia	Autosensing: 50Hz: (46-54Hz) / 60Hz: (56-64Hz)		
Power Factor / Factor de Potencia			
THDi (IEC 62040-3)			
Slew Rate / Seguimiento de Frecuencia:	1 Hz / s		
OUTPUT / SALIDA			
Phase / Fases	(Y): 3Ph + N + G or (DELTA): 3Ph +G (1Ph + N + G, Configurable) (*N)		
Voltage / Tensión de Salida	208/120Vac - 220/127Vac (*N1)		
Voltage Regulation / Regulación de Salida:	+/- 1%		
Max. Angle Deviation / Max. Desviación de Fase	2° (EN-62040-3)		
Max. Voltage Unbalance Ratio / Desbalance Max.	1% (EN-62040-3)		
Frequency / Frecuencia (Batt. Mode)	50 Hz +/- 0.1 Hz / 60 Hz +/- 0.1 Hz		
Current Crest Ratio / Factor de Cresta			
THDv (IEC 62040-3)			
Dynamic Accuracy / Regulación Carga Variable	6% (load variations 0%-100% & 100%-0% R Load)		
Transient Recovery / Recuperación Cambio Carga	100ms / 90% vs (0%-100% & 100%-0% R load)		
Transfer Time / Tiempo de Transferencia:	0 ms		
Waveform / Forma de Onda	Sine Wave / Sinusoidal Pura		
Power Output / Salidas	Terminal Block / Regleta de Conexión		
DC Offset / Componente DC	+/-50mV max.		
INTERNAL BYPASS			
Bypass type / Tipo de Bypass:	SCR board / Tarjeta SCR		
Input Range in Bypass / Rango entrada en Bypas:	96-146Vac (L-N) & 50/60 +/- 4Hz Freq.		
PROTECTION SYSTEMS / SISTEMAS DE PROTECCION			
Surge & Spikes Suppression / Supresión de Picos	(L-N: 1.490J) + (LG: 1.490J) + (N-G: 490J) = TOTAL=3.470J (10/1000us)		
Output Short-Circuits / Cortocircuitos a la Salida (ONLINE)	Electronic inverter shortcircuit protection / Protección del inversor contra cortocircuitos: <100ms: Current limited to max. capacity / Corriente limitada al 100% de Capacidad >=100ms: Output shutdown. UPS in Fault Mode / Salida se apaga. SAI/UPS en Modo Falla		
AC Input Current / Sobre-Corriente de Entrada AC	Input breaker or fuse / Disyuntor o fusible de entrada		
Battery overcurrent / Sobrecorriente de baterías	Internal Fuse protection in battery line / Protección por fusible interno en línea de baterías		
Phase rotation / Fases de entrada intercambiadas	Alarm & turn-on disable / Alarma y encendido inhabilitado		
Repetitive Overloads / Overloads repetitivos	3 overloads in 30min =UPS locks in bypass / 3 overloads en 30min = UPS a bypass		
Starting Time / Tiempo de Arranque			
EFFICIENCY / EFICIENCIA			
Eco Mode (100%/50% load)	97% / 96.5%		
AC Mode / Modo AC (100%/50% load)	92.5% / 93.5%		
Battery / En Batería (100%/50% load)	91.5% / 92.5%		
Inverter Efficiency / Eficiencia Inversor			
OVERLOAD / SOBRECARGA			
AC Mode / Modo Normal	[100%-110%: 60m] [110%-125%: 10m] [125%-150%: 1m] [>150%: 0.4s] to bypass		
Battery Mode / Modo Batería	[100%-110%: 60m] [110%-125%: 10m] [125%-150%: 1m] [>150%: 0.4s] to Cut-Off		
Bypass	[100%-130%: OK] [>130%: 1min]		

Technical Features / Características Técnicas 208V/120V (2/2)

OPTIMA-33-RT10 (208/120V) Page 2 of 2	5K-208-NB	10K-208-NB	20K-208-NB
BATTERIES / BATERIAS			
Battery Type / Tipo de Baterías	VRLA Sealed & Free maintenance / Sellada de libre mantenimiento VRLA (12V-9AH)		
Batteries location / Ubicación de las Baterías	External (XBAT) / Externas (XBAT)		
Battery Voltage / Voltaje de Baterías	+/- 120 Vdc		
Charging Amps / Corriente de Carga	1A - 12A Configurable (According to/ De acuerdo con DIN41773)		
Recharging Time / Tiempo de recarga (90%)	According to Battery Array / Según el arreglo de baterías usado (*N2)		
Charging Voltage / Voltaje del cargador (Floating)	+/- 136.5 Vdc		
Temp. Compensation / Compensación Temp.	20mV/ºC per battery (Input Air Temp/ Temp. Aire entrada: 25-50ºC)		
Shutdown battery Voltage / Voltaje DC Apagado	10.7Vdc/batt		
Low Battery Warning / Aviso de Baterías Baja	11.4Vdc per Battery		
Max. DC Current / Corriente DC Max. (150% load)	70A	140A	280A
INDICATORS / INDICADORES			
3.5 Inches Touch Screen / Pantalla Táctil de 3.5 Pulgadas	Full Status, Error Codes, & Real Time Values Estado, Códigos de Error y Valores en Tiempo Real		
ALARM / ALARMAS			
Acoustic Beep Alarm / Alarma sonora:	Battery Mode, Low Battery, Overload, UPS Failure Modo Batería, Baja Batería, Sobrecargas, Falla		
PRODUCT SIZE & NET WEIGHT / TAMAÑO Y PESO NETO (DxWxH) / (mm) / (Kg)			
SIZE: UPS (no internal batteries)	680*438*133 (3U)		797*438*176 (4U)
WEIGHT: UPS (no internal batteries)	26	28	42
SIZE: Ext. Batt Cab. / Baterías Externas	606*438*133 (3U)		
WEIGHT: Ext. batt Cab. / Baterías Externas	67		
PACKING: Individual Small Pallet per Unit / EMPAQUE: Equipo en Pallet Individual (DxWxH) / (mm) / (Kg)			
SIZE: UPS	870*580*250		980*580*285
WEIGHT: UPS	30	32	47
SIZE: Ext. Batt Cab. / Baterías Externas	870*580*250		
WEIGHT: Ext. batt Cab. / Baterías Ext.	74		
OPERATING / AMBIENTALES			
Operating Conditions / Condiciones de Operación	(0 to +40ºC) (*N3) <95 % (non-condensing / no condensante)		
Storage Temperature/ Temperatura de Almacenaje	-15 ºC to +60 ºC		
	<62	<65	<70
Protecting Coating / Tropicalizado de Tarjetas	Yes / Si		
Altitude / Altura	Max Altitude: 4.500m. (over 1.000m output capacity is de-rated 1% every 100m) Altura máx 4.500msnm (sobre 1.000m la capacidad de salida disminuye 1% cada 100m)		
COMMUNICATION / COMUNICACION			
Smart RS-232 & USB ports	Built-In, Supports / De fábrica, soporta: Windows family, Linux, Unix and MAC		
Smart Port (SNMP)	Optional / Opcional: LAN, AS400 & RS485		
SAFETY & STANDARDS / NORMATIVAS Y ESTANDARES			
CE Directives	IEC 62040 - 1		
UPS General Safety / Seguridad General	IEC 62040 - 1		
UPS EMC / Compatibilidad. Electromag.	IEC 62040 - 2 (Class C3)		
UPS Tests / Procedimiento Pruebas UPS	IEC 62040 - 3		
ESD / RS / EFT / Surge / CS / F. Mag. Field	IEC / EN 61000 - 4-2 & 4-3 & 4-4 & 4-5 & 4-6 & 4-8		
Low Frequency Signals	IEC / EN 61000 - 2 - 2		
Degree of protection / Grado de Protección	IP20		
Conduction & Radiation	IEC / EN 62040-2 (Cat 3)		
Safety / Seguridad	IEC / EN60950 - 1		
Quality and Enviroment	RoHS / ISO9001 & ISO14001		
Transportation / Transporte	ETS 300019 - 2 - 2 class 2.3		

Specifications can be modified to comply with special requirements. Technical specifications may change without further notice

Las especificaciones pueden bajo requerimiento adaptarse a proyectos especiales y pueden cambiar sin previo aviso.

(*N): Model **20K-208 does not support Single-Phase output configuration** / El modelo 20K-208, no admite configuración de salida Monofásica.

(*N1): **Output voltage is selectable by Screen** / Voltaje de salida configurable desde LCD

(*N2): **Recharging time based on previous 10min to 20min full discharging cycles** / Tiempo de recarga basado en ciclos previos de descarga profunda de 10 a 20min.

(*N3): **UPS can work up to 40ºC but batteries short their life over 25ºC** / El UPS puede trabajar hasta los 40ºC, pero las baterías acortan su vida útil por encima de 25ºC