

UltimaPro 33 Series

3-Phase Wye Online UPS with DSP & APFC, 10kVA-40kVA

A 3-phase double-conversion online UPS using PWM transformer-less technology, DSP-controlled technology, APFC in all phases, and ATS function for a high performing, reliable UPS for comprehensive power protection, performance, and efficiency. Enhanced features such as APFC, MBS, dual input power sources, and parallel-redundancy flexibility offers even greater reliance in power source and seamless operation. This the ideal solution for organizations demanding the highest level of power quality and reliability.

Typical Applications

- Server rooms
- Surveillance systems
- Lab equipment
- Office equipment
- Commercial equipment
- Financial institutions
- Storage systems
- Security systems

Protection From



1
Brief
Blackouts



2
Overvoltages



3
Undervoltage



4
Power
Surge



5
Power Sag



6
Line Noise



7
Frequency
Variation



8
Switching
Transient



9
Harmonic
Distortion



10
Voltage
Imbalance

High Overload Threshold Threshold

Keeps the UPS running in Line Mode when overloaded for a period time. This series will keep running in Line Mode up to 60 minutes at 110% overload capacity and up to 1 minute at 130% overload capacity.

DSP Controlled Technology

DSP (digital signal processor) controlled technology for high reliability, accuracy, and efficiency.

APFC in all Phases

APFC (active power factor correction) improves the power factor and power quality by reducing the load on the electrical system while improving energy efficiency and reducing power loss. By having APFC in all phases, the UPS is able to deliver reliable power protection.

Maintenance Bypass Switch (MBS)

Safely service the UPS while keeping connected equipment powered for zero downtime with the built-in MBS.

1A to 24A Adjustable Battery Charger

Adjust the battery charger based on the number of batteries in the UPS for faster recharge times.

EMI / RFI Filter

EMI / RFI filter suppresses electromagnetic noise and radio frequency interference transmitted from AC power.



Highlights

- DSP-controlled technology
- Active power factor correction in all phases
- 1.0 power factor
- High overload threshold
- ECO Mode & EPO function
- 50/60Hz frequency converter
- Built-in MBS
- Option to parallel up to 3 units

Dual Input

Hardwire the primary input power with Mains Input and secondary power source to Bypass Input for redundant power supply. If connected to an ATS, the Main Input will switch over to battery power while the secondary power source starts up if the Mains Input power fails or UPS is damaged. Once the secondary power source (usually generator) starts up to power the UPS, the UPS will run on generator power until the main power supply returns. If for some reason the secondary power does not start up, connected equipment will continue to run on battery power.

NOTE: Requires ATS (automatic transfer switch) for the UPS to automatically switch between the two input power sources.

Smart Battery Management

Maximize battery performance and lifespan with an intelligent, 3-stage battery charging system to auto-sense the optimal battery charging performance based on battery levels. Charging will be either constant current, constant voltage, or floating for optimal battery performance.

4.3-inch Touchscreen LCD

Large, easy-to-read LCD screen shows real-time status information of your UPS power conditions including voltages, capacity level, battery level, faults, event logs, settings, and more.

3P/3P and 3P/1P Operation (10kVA Model)

Supports 3-phase input and 3-phase output or 3-phase input and 1-phase output to meet the demands of different equipment.

OVERVIEW								
Model	ULT-P10K33LV	ULT-P15K33LV	ULT-P20K33LV	ULT-P10KL33LV	ULT-P15KL33LV	ULT-P20L33LV	ULT-P30KL33LV	ULT-P40KL33LV
Capacity	10kVA / 10kW	15kVA / 15kW	20kVA / 20kW	10kVA / 10kW	15kVA / 15kW	20kVA / 20kW	30kVA / 30kW	40kVA / 40kW
INPUT								
Nominal Voltage	3 x 208 / 220Vac (3Ph + N + G)							
Voltage Range	138 ~ 270 VAC at 50% load ; 173 ~ 253 VAC at full load							
Frequency	50/60Hz (auto-sensing)							
Frequency Tolerance	50/60Hz ± 4Hz							
Power Factor	≥ 0.99 at full load							
Harmonic Distortion (THDi)	< 5% at full load							
OUTPUT								
Nominal Voltage	3 x 208 / 220Vac (3Ph + N + G)							
Voltage Range (On Battery)	±1%							
Frequency Regulation (On Battery)	50/60Hz ± 0.1Hz							
Current Crest Factor	3:1 (max.)							
Voltage Distortion	2% at linear load; 4% at non-linear load							
BYPASS								
Configuration	3Ph + N + G							
Voltage Tolerance	-30% to +20% (adjustable)							
Frequency Tolerance	50/60Hz ± 4Hz							
Short Circuit Capability	Breaker protection							
EFFICIENCY								
AC-AC	93.0%							
Battery Mode	92.5%							
ECO Mode	97.0%							
TRANSFER TIME								
Line Mode <--> Battery Mode	0ms							
ECO Mode <--> Battery Mode	<10ms							
Inverter <--> Bypass	0ms							
OVERLOAD THRESHOLD								
100% to 110% Load	60 minutes (Line Mode); 30 seconds (Battery Mode)							
111% to 130% Load	1 minutes (Line Mode); 10 seconds (Battery Mode)							
>130% Load	1 second or until optional add-on breaker trips (Line and Battery Modes)							
BATTERY								
Quantity & Size	12V/9Ah x (10+10 pcs)	12V/9Ah x (10+10 pcs) x 2 strings	12V/9Ah x (10+10 pcs) x 3 strings	(No internal batteries)				
Float Charging Voltage	±136.5V	±136.5V	±136.5V	±13.65VxN (N=8-10)	±13.65VxN (N=8-10)	±13.65VxN (N=8-10)	±13.65VxN (N=8-10)	±13.65VxN (N=8-10)
Charging Current	1A-12A (adjustable)	12A (optional 16A/20A)		1A-12A (adjustable)	4A - 12A (adjustable) (optional 16A/20A)		8A - 24A (adjustable)	
COMMUNICATION INTERFACE								
Standard Interface	USB							
Optional Interface	SNMP, AS400, or relay card							
Software Compatibility	Windows® / Linux / Unix / Mac OS®							
STATUS INDICATORS								
LCD	Load Level, Battery Level, Input / Output Voltage, Discharge Timer, and Fault							
Audible Alerts	Battery Mode, Battery Low, Overload, Fault							
REGULATIONS								
Standards	Follows UL1778, CSA 22.2 No. 107.3, and FCC Part 15 Class A (EMC)							
PHYSICAL								
Dimensions (DWH) (mm/in)	667 x 250 x 827 / 26.3 x 9.8 x 32.6	865 x 300 x 1020 / 34.1 x 11.8 x 40.2		667 x 250 x 827 / 26.3 x 9.8 x 32.6	865 x 300 x 1020 / 34.1 x 11.8 x 40.2		790 x 420 x 1200 / 31.1 x 16.5 x 47.2	
Weight (kg/lb)	95 / 209.5	181 / 399.1	231 / 509.4	45 / 99.2	80 / 176.4	81 / 178.6	150 / 330.3	160 / 352.8