Aplab **EVEREST SERIES**

10KVA to 80KVA

EVEREST

Uninterruptible Power Supply Systems

True On-Line Technology. 3 Phase in- 3 Phase out

- State of the art IGBT & PWM technology
- Double conversion technology with high efficiency
- 'Power Save' operation with 'Eco-Mode' configuration
- Power factor correction
- Low input current distortion-green mode
- Reliability of the battery ensured by intelligent 'Neo-Charger'
- Redundancy guaranteed by 'True Share' parallel systems
- Incredibly compact in size and light in weight
- Built-in battery upto 30KVA (option)
- Expandable and variable battery banks
- Computer network communication with full SNMP access
- Built-in maintenance and zero delay static by-pass
- Total galvanic isolation between Input and output

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Technology

- Voltage accuracy, essential for supplying non-linear loads,
- High power efficiency >92.5% overall & 98% in Eco-mode
- Maximum reliability through unique packaging and thermal management

EVEREST UPS system is designed to provide the most suitable features and characteristics:

- Wide input voltage tolerances
- High power factor
- High performance when supplying non-linear loads,
- Parallel systems for redundancy and field upgrade of power capacity
- Very high efficiency
- Compact size
- Very low acoustic noise
- Low heat dissipation-losses
- Low running costs: High efficiency and Eco-mode function
- Reliability and long life of the battery ensured by 'Neo-Charger'.

Neo-Charger

Considering the importance of the battery in a UPS system and to maximize its lifetime, **EVEREST** uses a special technology termed 'NEO-CHARGER'. Neo-Charger Technology enables:

- Intelligent management of the battery recharge by a separate charger
- Automatic charging voltage control according to ambient temperature
- Very low residual, ripple voltage
- Battery availability controlled by automatic test
- Protection against slow discharge
- Protection against over current charging
- Automatic battery test with indication of battery condition
- Read-out of all the battery parameters on display- remaining back-up time, charge level, current and voltage

On-Line, Double Conversion, Parallel Redundant Technology

True on-line, double conversion technology of **EVEREST** series UPS ensures highest power protection and maximum reliability for the most critical applications. It is composed of:

A Rectifier: It converts the AC Line Power Input into a DC Power supply for the inverter. As it works directly with the Line Voltage, it is provided with an RFI filter for eliminating radio noise interference, a circuit for power factor correction, and protections against over currents and Deep Battery Discharges.

A separate battery charger: It intelligently manages the battery recharge, and maximizes the lifetime of the battery.

An inverter: It provides a low distortion, high stability and noise-free Output Supply Voltage, by converting the DC voltage supplied by either the rectifier or the battery. The inverter uses the latest PWM Technology using New Generation IGBTs (Insulate Gate Bipolar Transistors) switching at high frequency.

A Static By-pass: In case of excessive overload or unlikely event of failure, Static by-pass switch transfers the load directly to the commercial Line automatically and without any interruption.

A Manual By-pass: Prevents supply interruptions to the load during service and maintenance. If the manual by-pass is activated, the load is powered from the commercial line and the UPS is effectively isolated from the power supply circuit and can be switched off. It ensures continuous power supply to the load while the necessary testing or repairs are made on the machine without any risk for the user.

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Eco-Mode

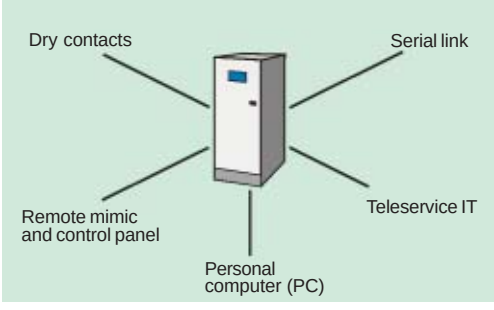
The Eco-Mode function allows cost-effective operation of **EVEREST** systems. In this mode, the load is supplied from the commercial line. In the event of line failure, the inverter takes over the loads and provides supply continuity to the connected systems.
Operation in Eco-Mode can be selected manually or programmed through the software. As an example, a user, automatically and from a remote PC, could program night-time operation of the UPS in Eco-Mode so that day-time operation is in “On-line” mode when power to the more critical loads is needed.

Harmonics Suppression (THCDL)

This solution significantly reduces the harmonic distortion (as low as 5%) of the input current to the UPS. This allows the UPS to take sinusoidal current from the input line supply even with highly distorting loads connected, at its output.

Communication and Remote Control

EVEREST provides a complete range of solutions to communicate not only with the users or service personnel, but also with the computer systems themselves.
The Graphic Software sets up dialogue between the computer and your **EVEREST** Series UPS system. It easily integrates with all the major Operating Systems, such as WINDOWS, NOVELL, OS/2, UNIX”.



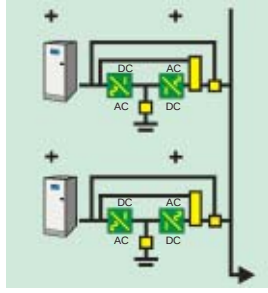
Automatic Shutdown of servers:
When the input line supply is down, the users are informed of the UPS working on battery back-up.
Before the end of the battery back up, UPS software performs an automatic shutdown of the current applications and turns off the inverter.

EVEREST Remote Monitoring and Management :
Our UPS Software allows the remote monitoring of **EVEREST.** The user can program the automatic battery test and draw up statistics concerning the quality of the incoming and conditioned outgoing Power supply.

EVEREST management in an SNMP Network:
The SNMP agent of UPS Software allows the **EVEREST** system to be monitored like any other computer peripheral. It provides remote and real-time access for information on the **EVEREST** running status.

Parallel Operation

Parallel configuration
is based on a modular concept and offers true flexibility.
The system Power can be increased at any time, by adding modules even after installation and commissioning.



Maintenance

Given the vital importance of UPS, offering prompt Quality Service is just as important as the Product Quality.
In order to increase reliability by reducing MTTR (Mean Time to Repair) by way of simple and rapid maintenance, the **EVEREST** UPS incorporates:

- A socket enabling maintenance engineers to connect a personal computer to carry out checks, diagnostics and configuration of sub-units.
- Modular design for easy access to system components.

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Specifications

	MODEL	EO 310	EO 315	EO 320	EO 330	EO 340	EO 360	EO 380
	Output KVA	10	15	20	30	40	60	80
	Power Factor	0.8						
INPUT	Voltage	380V/400V/415V 3phase						
	Tolerance	± 20%				±15%		
	Frequency	45Hz to 65Hz						
	Input Current (max) per Phase	18A	27A	36A	54A	72A	108A	144A
	Input Power Factor	0.98*						
	Input Current Harmonic Distortion (THCDL version)	<5%						
OUTPUT	Voltage	380V/400V/415V 3phase						
	Tolerance (static condition)	<1%						
	Tolerance (dynamic condition)	- 4% +2%						
	Harmonic Distortion on linear load	<1%						
	Harmonic Distortion on non linear load	Global < 6%						
	Frequency	50Hz ±0.01% (async mode)						
	Crest Factor	upto 4						
	Overload	100%-125% load 10 min						
		125%-150% load 1 min						
	Overall Efficiency	92.5%						
	Eco-Mode Efficiency	98%						
BATTERY	Battery Voltage (nominal)	30 Battery (360V DC) typical 26 battery (optional)*						
	Battery back-up	Internal	Internal	Internal	Internal	External	External	External
		upto 20min	upto 10min	upto 20min	upto 10min			
GENERAL	Protection	Overload/Short circuit DC Over/Under voltage and Over heat						
	Indication	Line on, Battery on, Mains abnormal, Load on Inv., Load on Aux. and Inv trip						
	Metering	Input volt., Batt. volt., Output volt., Bal. batt. autonomy, Output freq., and Load power%						
PHYSICAL	Weight without Battery (Kg)	240	255	270	285	490	570	600
	Dimensions (mm) WxDxH	460x680x1170		600x800x1400		550x800x1400		500x800x1930
ENVIRONMENT	Audible Noise	<50dBA						
	Operating Temperature	0-40°C						
	Relative Humidity (non-condensing)	95%						
	Standards	EN 50091-1 (safety), EN 50091-2 (EMC), EN 60950, EN 55022, CE						
OPTIONS	Battery Cabinet, Parallel Redundancy, Serial Port Interface, SNMP Interface, Remote Signaling and control Unit, Communication Software, Remote Signaling Interface, Low Harmonic Filter, Dry Contact Interface, THCDL Version*, Teleservice							

* THCDL version

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