

# NEUROPOWER

Powering Possibilities.  
Connecting Futures.



- Modular Online UPS
- **+Power Series**

# +Power Series

In some cases, Neuropower's +Power E Series isn't just quite enough, Thus, we revolutionized the +Power E Series to come up with a more sophisticated version of itself to become Neuropower's +Power Series.

Being the more sophisticated version, the +Power Series offers the flexibility of growth in power consumption without a hassle, scaling up to 300 kVA easily on top of parallel technology. We also applied the modular benefits to the +Power's UPS power modules, STS modules as well as battery modules simplifying maintenance or system replacement even further than what was known.

The goodness of +Power does not end here, all the critical features of a well-built modular UPS in terms of UPS monitoring, hot-swappable mechanism, and UPS exterior protection are all further enhanced with innovative designs creating the perfect UPS solution for any critical applications on the planet.



**CRITICAL MISSION APPLICATION**



**DATA CENTER**



**LARGE MEDICAL SYSTEM**

# +Power Series

## 30kVA-300kVA features

Learn what makes Neuropower's +Power UPS a unique choice to provide reliable and constant power supply for critical applications.

### 1. 10.0" LCD information display with mimic flow

Allows easy monitoring and control experience of the UPS parameters. This includes load level, battery level, input or output voltage, discharge time and fault conditions.

### 2. Adjustable battery configuration and battery charging current

Giving users the convenience in ensuring an optimum charging current for all battery ratings used to have a longer battery backup time.

### 3. Variety of communications options so that the UPS is never left unmonitored

Manage your power smartly by connecting to any communication ports such as a USB port or RS232, dry contact, Emergency Power Off (EPO) as a safety feature and intelligent slot (SNMP or Modbus).



Control panel of +Power 30U system (top) and build-in smart communication port inside +Power models (bottom)





*Front (top) and back (bottom) view of Power Module for +Power series.*

#### 4. Built-in maintenance bypass

To facilitate convenient UPS system maintenance procedures without powering down the load and to avoid possibilities of data loss or equipment damage. All control panels and connectors are accessible from the UPS's front.

#### 5. Pluggable power modules, STS modules and battery modules

Benefiting users with modular design through its hot-swappable modules. It minimizes the UPS's mean-time-to-repair (MTTR) even further than regular modular UPS designs.

#### 6. N+X parallel redundancy up to 300kVA in a single chassis

Suitable for critical applications with high power consumption. Ensuring the total load demand is met by all working UPS power modules by sharing the load between themselves equally. If one of the power modules fails and needs maintenance, the power module on standby will take over and support the load.

## 7. True online double conversion technology for pure sine wave output

Converting power twice to produce a smooth and clean output for sensitive equipment. It also enhances equipment performance and efficiency while avoiding the possibilities of power fluctuations.

## 8. DSP technology with active power factor correction in all phases

Perfect for critical applications, this feature ensures users a high output performance from the UPS at a high power efficiency (up to 96% with output power factor 1.0).

# +Power Series Models

Comes in two sizes, highly convenient features and a variety of power ratings to provide a versatile power protection solution.

+Power Series -  
30U System (Left)  
and 42U System (Right)



# Technical Specification (+Power models)


	No. of UPS Power Module(s)	1	2	3	4	5	6	7	8	9	10
Specification	Model	+POWER 20KS	+POWER 40KS	+POWER 60KS	+POWER 80KS	+POWER 100KS	+POWER 120KS	+POWER 140KS	+POWER 160KS	+POWER 180KS	+POWER 200KS
	Total UPS Capacity (kW)	20	40	60	80	100	120	140	160	180	200
	Model	+POWER 30KS	+POWER 60KS	+POWER 90KS	+POWER 120KS	+POWER 150KS	+POWER 180KS	+POWER 210KS	+POWER 240KS	+POWER 270KS	+POWER 300KS
	Total UPS Capacity (kW)	30	60	90	120	150	180	210	240	270	300
	Topology	Online Double Conversion									
Input	Nominal Voltage (VAC)	3 x 380 / 400 / 415 (3Ph + N)									
	Voltage Range (VAC)	305 - 477 at Full Load; 208 - 304 at < 70% Load									
	Nominal Frequency (Hz)	50 or 60 (Auto Sensing)									
	Frequency Range (Hz)	40 - 70									
	Power Factor	> 0.99 at 100% Load, > 0.98 at 50% Load									
	Harmonic Distortion (THDi)	< 3% at 100% Load									
	Output	Nominal Voltage	3 x 380 / 400 / 415 (3Ph + N)								
Voltage Regulation (Steady State)		≤ ±1% Typical (Balanced Load); ≤ ±2% Typical (Unbalanced Load)									
Voltage Regulation (Transient)		≤ ±5% (Typical)									
Nominal Frequency (Hz)		50 or 60									
Synchronized Frequency Range (Hz)		46 - 54 or 56 - 64									
Overload Capability		1 hour for 110%, 10 mins for 120%, 1 min for 150%, 200ms for >150%									
Harmonic Distortion (THD)		≤ 1% (Linear Load); ≤ 4% (Non-Linear Load)									
Efficiency		> 96% at 50% Load, > 95% at over 25% Load									
Battery or Charger	Outlet	Terminal Block									
	Nominal Voltage (VDC)	± 216 (12 x 36pcs)									
	Maximum Voltage (VDC)	± 240 (12 x 40pcs)									
	Minimum Voltage (VDC)	± 192 (12 x 32 pcs)									
	Float Charging Voltage (V / Cell)	2.25									
	Boost Charging Voltage (V / Cell)	2.35									
	Temperature Compensation	Yes									
Physical	Maximum Charging Current	6A for 20kVA Power Module / 8A for 30kVA Power ModuleS (User Adjustable)									
	Chassis Dimension, W x D x H (mm)	600 x 1100 x 1485 (30U)					Not Applicable				
Communication	Interface Port	USB, Smart RS 232, EPO and Intelligent Slot									
	Intelligent Slot	AS400 / SNMP - optional									
	Emergency Power Off (EPO)	Yes									
Power Management	Software	Yes, supports Windows family, Unix, Linux, Ubuntu, Solaris and MAC operating system									
Operating Environment & Design Standards	Operation Temperature (°C)	0 - 40									
	Relative Humidity	0-95% Non-Condensing									
	Altitude	< 1000m for Nominal Power									
	IP Class	IP 20									
	Safety	IEC/ EN 60950-1; IEC/ EN 62040-1									
	EMC	IEC/EN 62040-2 category C3									

- When temperature is above 30°C, the output power for 20kVA will be derated, 17kW @ 31-35°C and 14kW @ 36-40°C; 30kVA will be derated, 27kW @ 31-35°C and 24kW @ 36-40°C.
- Every battery module consist of 10 pieces of 12V7AH or 12V9AH SLA batteries. For a complete DC link system, it requires 4 battery modules.

# Technical Specification (Modules)

Model	Description	Dimension, W x D x H (mm)	Weight (kg)
PM-20HV	3P/3P 20kVA / 20kW Power Module	440 x 650 x 132 (3U)	34.0
PM-30HV	3P/3P 30kVA / 30kW Power Module	440 x 650 x 132 (3U)	34.5
Battery Module	10 pcs of 12V9AH batteries	107 x 735 x 155	26.0

**NEUROPOWER (M) SDN BHD** 200301034724 (637145-P)

 No. 23, Jalan Serendah 26/41, Hicom Industrial Estate,  
40400 Shah Alam, Selangor.

 enquiry@neuropower.com.my  1300 88 6772

 www.neuropower.com.my  NeuropowerMy

