

# MPLUS SERIES

## 30K-300K



Data Center



Genset



Batt.Charger



Emergency  
Power Backup

## Features

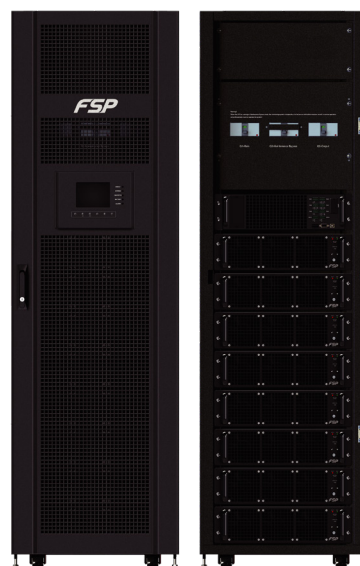
- High efficiency online double conversion technology
- High scalability
- Unity output power factor
- Modular design lowers MTTR
- N+1 or N+R Parallel Redundancy for power guarantee
- Ease of installation and maintenance
- Flexible battery configuration adapts different applications
- Highly reliable operation with redundant power supply in STS
- User-adjustable charging current
- High overload capability
- Graphic 5.7" LCD design for easy management
- Optional 10" touch LCD panel



EAC CE



FORTRON/SOURCE



MODEL	Mplus 30K	Mplus 60K	Mplus 90K	Mplus 120K	Mplus 150K	Mplus 180K	Mplus 210K	Mplus 300K
<b>PHASE</b>	3-phase in/3-phase out							
<b>TOTAL CAPACITY*</b>	30kW	60kW	90kW	120kW	150kW	180kW	210kW	300kW
<b>UPS POWER MODULES</b>	1	2	3	4	5	6	7	10
<b>TOPOLOGY</b>	True Double-Conversion Online							
<b>INPUT</b>								
Nominal Voltage	3 x 380Vac / 400Vac / 415Vac (3Ph+N)							
Voltage Range	305~478Vac at 100% load; 208~304Vac at <70% load							
Nominal Frequency	50 / 60Hz (Auto sensing)							
Frequency Range	40~70Hz							
Power Factor	> 0.99 at 100% load, >0.98 at 50% load							
Harmonic Distortion (THDi)	< 3% @ 100% load							
<b>OUTPUT</b>								
Nominal Voltage	3 x 380Vac / 400Vac / 415Vac (3Ph+N)							
Voltage Regulation (Steady state)	≤± 1% Typical (balanced load), ≤± 2% Typical (unbalanced load)							
Voltage Regulation (Transient)	≤± 5% Typical							
Nominal Frequency	50 / 60Hz							
Frequency Range (Synchronized range)	46~54Hz or 56~64Hz							
Overload Capability	1 hour for 110%, 10 mins for 125%, 1 min for 150% and 200ms for >150%							
Harmonic Distortion	≤ 2% THD (Linear Load) ≤ 4% THD (Non-linear Load)							
Efficiency	Up to 94.5%							
<b>BATTERY / CHARGER</b>								
Nominal Voltage	+/- 216V (12V x 36Pcs)							
Maximum Voltage	+/- 240V (12V x 40Pcs)							
Minimum Voltage	+/- 192V (12V x 32Pcs)							
Floating Charge Voltage	2.25V / Cell							
Boost Charging Voltage	2.35V / Cell							
Temperature Compensation	Yes							
Maximum Charging Current	8A (User-djustable)							
<b>PHYSICAL</b>								
Medium Size (D x W x H)	600 x 1100 x 1485 (30U) mm							
Full Size	600 x 1100 x 2030 (42U) mm							
<b>ENVIRONMENT</b>								
Operation Temperature	0 ~ 40°C							
Relative Humidity	0 ~ 95% non-condensing							
Altitude	<1000m for Nominal power							
IP Class	IP 20							
<b>MANAGEMENT</b>								
Smart RS-232 / USB	Supports Windows® 2000 / 2003 / XP / Vista / 2008 / 7 / 8 / 10, Linux, Unix and MAC							
Optional SNMP	Power management from SNMP manager and web browser							
<b>STANDARDS</b>								
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 factor will be de-rated, 0.9 at 31°C~35°C and 0.8 at 36°C~40°C.

\* One battery module contains 10pcs of 12V / 7Ah or 12 / 9Ah sealed lead acid batteries in one tray. One complete battery set contains 4 battery modules.

\* If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

\* Product specifications are subject to change without further notice.

## High efficiency online double conversion technology

Mplus is applied online double conversion technology with high performance over 94.5% at 50% load. It significantly reduces overall Total Cost of Ownership (TCO).

## High scalability

DSP control provides an improved solution with high performance. Integrated with modular design and parallel technology, Mplus simplifies future power expansion.

## Unity output power factor

Mplus delivers unity output power (kVA=kW) providing the maximum power capacity to mission critical loads. It satisfies the requirements of the latest servers and optimizes IT investment with every penny.

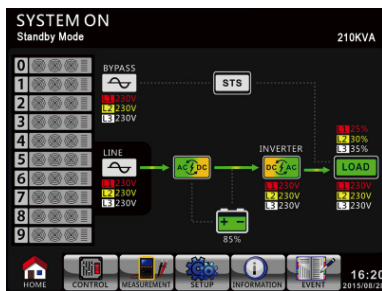
## Modular design lowers MTTR

Modular design is applied in power module, STS module and battery module. It will simplify maintenance and replacement with low MTTR (Mean Time To Repair).

## N+1 or N+X parallel redundancy for power guarantee

Scalable architecture allows you to optimize cost expense to meet power demands by vertically expanding in a single rack enclosure from 30kVA to 210kVA and achieve N+1 or N+X redundancy in the same rack.

## Optional 10" touch LCD panel



## Ease of installation and maintenance

Built-in maintenance bypass assures continuous power to critical loads during UPS maintenance. Besides, to facilitate installation and maintenance, all panel control and connectors are front accessibility.

## Flexible battery configuration adapts different applications

Battery numbers can be adjusted flexibly. It will adapt different power demands and shorten system downtime. Battery voltage can be set from 32 to 40 pieces per string.

## Graphic 5.7" LCD design for easy management

Designed for easy management, Mplus is equipped with 5.7" graphic LCD screen. Intuitive design enhances display information identified and advanced configuration.

## High reliable operation with redundant power supply in STS

Mplus provides 2 power supplies in STS. It will ensure no shutdown risk for STS.

## User-adjustable charging current

Mplus provides maximum 8A or 6A charging current for every power module and it's user-adjustable based on requirement.

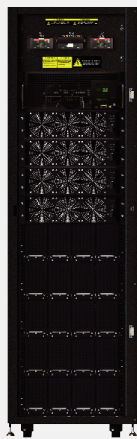
## High overload capability

Mplus provides 2 power supplies in STS. It will ensure no shutdown risk for STS.

### Standard Series



Mplus 30U-90



Mplus 42U-120

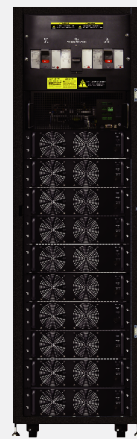
### Extended Series



Mplus 30U-120



Mplus 30U-180

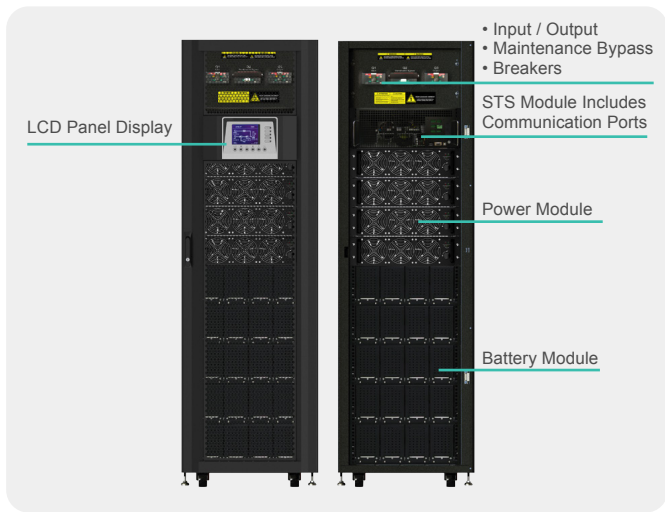


Mplus 42U-200



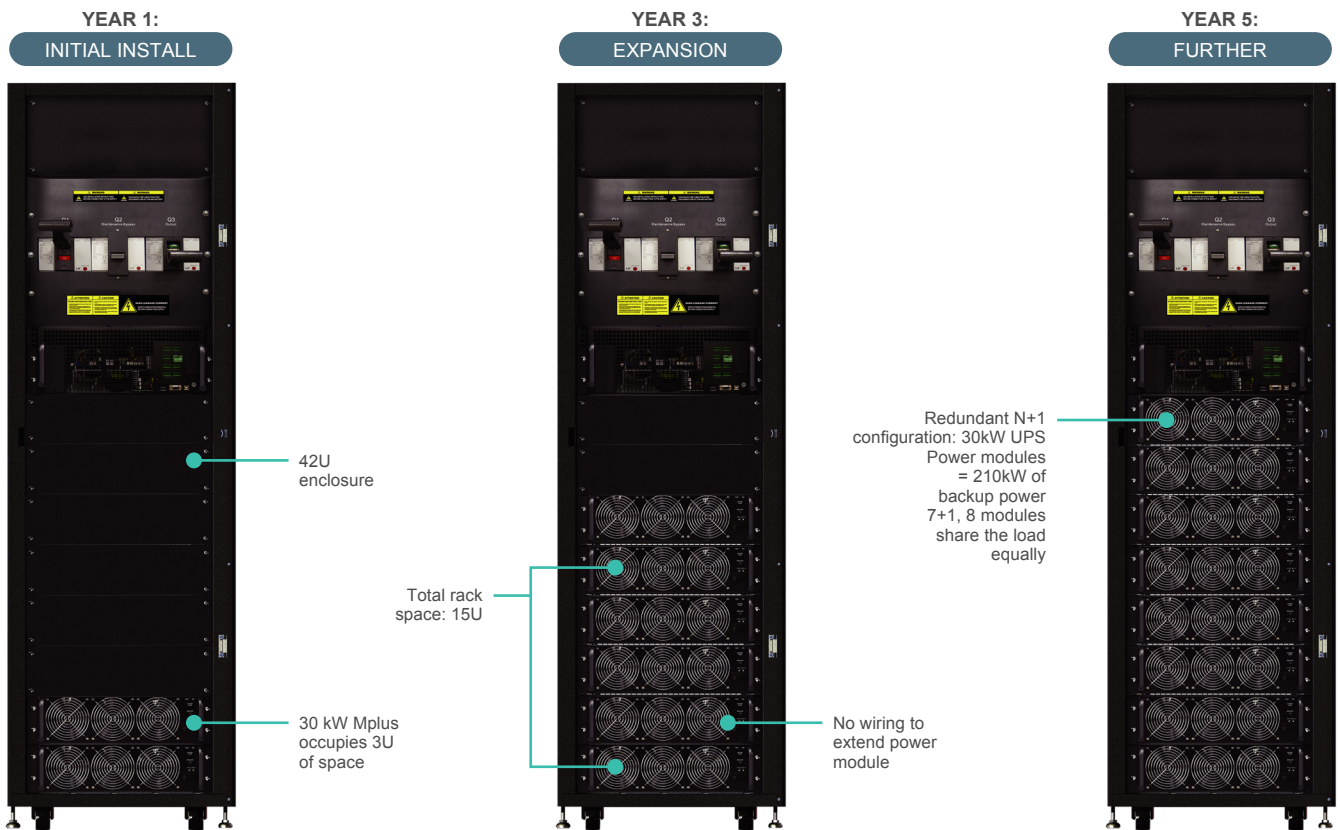
Mplus 42U-210





## Expandability. Flexibility. Uninterruptibility. Via Modular architecture

Thanks MPLUS Modular design architecture, scalable and compact size 3U rackmount power module that supplies 30kW of backup power protection. Whole system can be easily expanded as your data center growth. Plug and play N+X,N+1 redundancy design optimizes customer's power demand and enhance the capital investment plan and deployment. MPLUS smart intelligent load sharing system proportionates workload into each power module without linking any extra communication, paralleled, current share cables. Besides, system is no need to shutdown or interrupt, MPLUS can provide backup support during power module maintenance.



MPLUS Offers 20kVA and 30kVA power module, no matter which model, e.g. in 30U extend model, power module can be installed up to 6PC, 120kVA with 20kVA or 180kVA with 30kVA 6PC power modules. In addition, same cabinet reduces wiring, or human error operation issue and ensures backup power increased to cover new power demand in a right way.

MPLUS also offers 15U cabinet as economy purpose, full range power rating is not only suitable for large IT room, Datacenter, but also adequate to infrastructures and different purposes.

MPLUS 30U/42U extremely flexible characteristic, One power module with 30kW unity power factor can be single or multi module operation. In 42U cabinet model can up to 7+1 modules 210kW, elastic design offers proper backup power protection with appropriate capital investment whenever needed.



15U 90kW