3-Phase On-line UPS

# **PlusMAX 1 Series Introduction**

# 20KVA to 200KVA



# **PlusMAX 1 Series OVERVIEW**

• Advanced platform

- **O** High efficiency
- **High power density**
- High reliability
- Easy installation & Maintenance







## Leading Technology



#### **Embedded Technology**

- Global Best Practice & Technology

#### **Sharing Platform and Component**

- Cost
- Maintenance

#### **Standardized Production Process**

- Assembly & Testing
- Coating



# **Key Feature**

Power rating: 20/30/40/60/80/100/120/160/200kVA

**Topology:** Double conversion topology on-line UPS, High

frequency , IGBT rectifying Tower design

Input/Output: 220V/380V 3Ph+N+PE

Frequency: 50/60 Hz

#### Key feature:

- 0.9PF
- Parallel up to 4 units
- Intelligent battery management
- ECO mode
- Battery quantity adjustable
- Dual input & Single input adaptive
- Compact-size on footprint
- Easy installation and maintenance







# **Customer Value**



#### **High Power rating**

- Single unit up to 200kVA
- 0.9PF
- Paralleled units up to 800kVA



## Low TCO

- Inverter mode efficiency 94%
- ECO mode efficiency 98%
- 44% footprint saving
- Easy installation & maintenance



### Easy maintenance

- 60minute MTTR, Class modular
- design & frontal operation
- WINPOWER monitor
- Variety accessory



#### **More Reliability**

- Dustproof design
- Intelligent battery management
- Dual input redundancy design
- Parallel technology
- High quality component design



# LOWEST TCO – ECO MODE

#### ECO mode efficiency high to 98%:

- 98% efficiency(ECO mode), offering the lowest
  Total Cost of Ownership(UPS electrical cost saving
  + cooling electrical cost saving)
- Surge suppression-non transformer filter technology
- Fast transfer time-typical 4ms(other Competition need 6ms at ECO mode transfer)
- Fault detection ensures more security Detection Techniques for patented technology to determine load faults and upstream power failures in advance
- Key component more reliability, long life time at ECO mode

#### Save running expense

Competitor 80KVA UPS efficiency is 92% and 80KVA ECO efficiency up to 98%.

If take typical 75% load (54KW), 6% gap in efficiency will bring,

6%\*54KW\*24Hours\*365\*5=141912KWH

energy saving in 5 years operation.



## **Enhance Environmental Adaptability**

PlusMAX 1 Series applies advanced PCBA coating technology, offering customers an excellent anti-corrosion performance.

- Easy Programming
- Automatic Coating Process
- Blue-ray Detection







## **BEST PROTECTION-DUST FILTER**

Standard dust filter, enhance environmental adaptability

- Easy disassemble and clean, low maintenance cost
- Complaint of UL94 fireproof standard and UL900 dust filter standard
- Fire resistant

Dustproof design: Structure, UPM, component layout and air distribution design follow safety standard, reduce inner dust hoarding.





## **Intelligent Battery Management**

Adopts intelligent battery management system, bring the benefit to customer in below:

- Accurately forecast battery working mode and remind customers of potential malfunction
- Easy maintenance
- Parameter configurable according to different brand of battery by setting
- Extend 50% battery life time





# **Leading Parallel Technology**

Internal parallel kits powering by high reliability CAN bus.

- Easy parallel redundancy
- Parallel up to 4
- Non principal and subordinate unit distinguish
- Perfect load sharing and active protection





## **High Quality Component**

Key components are from top international brand provider







# **SANYO DENKI**









# **Easy Installation and Maintenance**

- Modular design, high reliability, easy maintenance
- All maintenance on the front, footprint saving
- 20-80k standard input switch, output switch, bypass switch and maintenance bypass switch
- Battery quantity adjustable, UPS can continue run even one battery fail, low maintenance cost
- Wheel in the bottom and ease of moving
- Support dual input, or single input
- Versatile communication interfaces provide for different applications



## LOWEST MTTR

#### **Mean Time To Repair(MTTR) < 60minutes**

- Maintenance on the front
- UPM power module swappable design
- Sliding tray
- Modular weight less 25Kg
- Fire resistant, cleanable dust filter
- Modular design for fan



