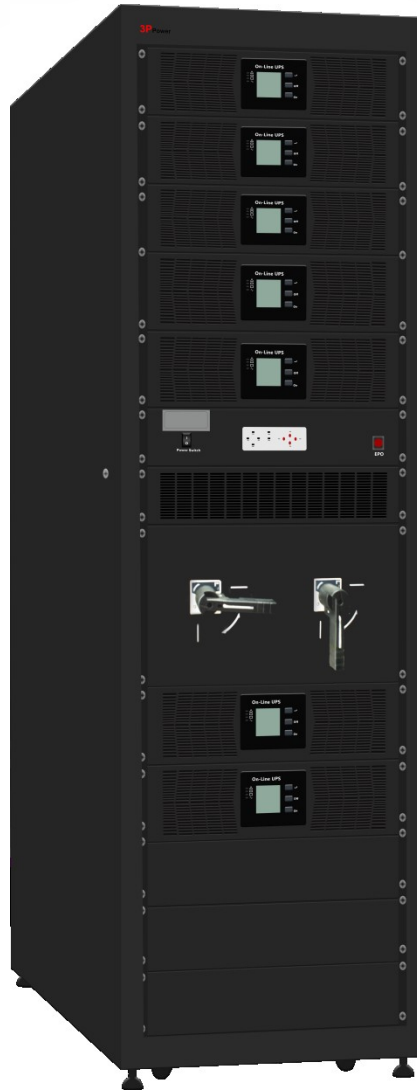


3P Power

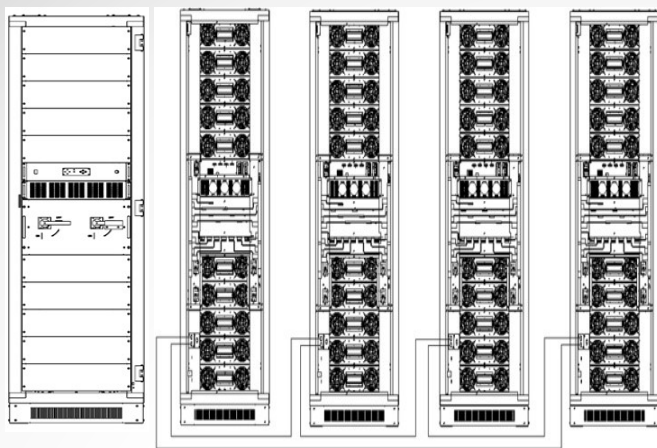
Passion **P**rofession **P**erfection



PRODUCT CATALOGUE

Excellence MOD Series Scalable Modular AC UPS

Excellence MOD Series Scalable Modular AC UPS



Excellence MOD Series Scalable Modular UPS are suitable for both Industrial and Commercial environment



* Industrial application such as Process & Control System, Industrial Machinery, Instrument & Measurement, Process Monitoring, Control and Security



* Infrastructures application such as Hospital, Airport, Data Centre, Telecommunication, Semiconductor, Water Treatment and Rail Transportation



* Energy Industry application such as Oil & Gas, Petrochemicals, Power Plant, Power Transmission



* Military application such as Communication and Data Centre

- **True online double conversion with distributed bypass**

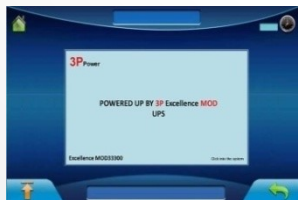
The true online double conversion scalable modular UPS designed with distributed Static Bypass provides the better reliability and availability. The design topology of distributed bypass makes the individual module to perform as a standalone UPS and the UPS foot-print smaller.

- **Robust electrical performance to prevent the damages caused by up and down-streams**

This UPS is designed to accept wide input voltage and frequency range to cope with the worst utility conditions. It can eliminate harmful distortion from utility power and withstand all kinds of severe impacts from various loads. It's capable to support heavy duty equipment, production equipment and DCS (Distributed Control System) system.

- **Colourful Multifunctional HMI Touch Screen**

The 7 inch colourful multifunctional HMI (Human Machine Interface) TFT touch screen allows easy and humanized operation of the UPS. It gives access to the most important parameters, status and alarms, control commands, input, output, battery measurements (power, current, voltage, frequency and temperature) and settings. The MOD series UPS includes 500 events' log allowing precise and detailed identification of any event.



- **Comprehensive UPS Monitoring**

Built-in slots of RS232-1, RS232-2, RS485, intelligent slots 1, 2, 3 for SNMP, JBUS and MODBUS and Dry Contacts provide users' total preference on-site.

- **Advanced Battery Management (ABM)**

The ABM system allows the flexible battery configuration and 3 steps charged control as well as extends the life span of battery by having a periodic battery self-test.

- **Flexible Hot Swappable Design**

This unique modular type design of UPS module and monitor module can be added or replaced live while another module continues protecting the load. This functions help to eliminates the need to go to bypass for module replacement or upgrading works.



- **Equipment Efficiency**

Increased efficiency also leads to higher sustainability, through reduced carbon emissions. With high efficiency being translated thus helps to reduced cooling and electrical losses, which in return helps to minimise operational expenditure costs.

- **Easy integration into existing electrical networks or generator**

During wiring connection, Excellent MOD Series with rare bottom termination can be accessible either from top or from bottom under different environmental condition. Besides, this UPS is fully compatible with generator.

- **Maximum Safety Features**

Maximum safety features is always the top priority for our equipment. Thus, when designing hot-swappable design, distributed bypass, Modular UPS with input breakers, in-built back-feed protection and all designs have been ensure to be in compliance with all safety regulations world wide.



Excellence MOD Series Scalable Modular AC UPS

Technical Specification - 3 Phase in / 3 Phase out

MODEL	MOD33020	MOD33060	MOD33080	MOD33100	MOD33120	MOD33160	MOD33180	MOD33200
CAPACITY in kVA / kW	20kVA/18kW	60kVA/54kW	80kVA/72kW	100kVA/90kW	120kVA/108kW	160kVA/144kW	180kVA/162kW	200kVA/180kW
SYSTEM								
System Efficiency @ DCM (Double Conversion Mode)	95%							
System Efficiency @ ESM (Energy Saver Mode)	98%							
Static Bypass Rating	20kVA to 200kVA (Distributed Static Bypass)							
External Paralleling	Up to 4 Cabinets can be paralleled							
UPS Topology	Double Conversion							
IP Rating	IP 20 As Standard (Option: Up to IP42 is available upon request)							
Acoustic noise at 1 m, in 25 °C Ambient Temperature	< 70 dBA in DCM, < 55 dBA in ESM							
Altitude (Maximum)	Within 1000m above sea level at 40 °C, Every 100m increase, Capacity decrease 1%, Maximum 2000m							
Cable Entry	Rare Bottom (Customization is available upon request)							
MODULAR UPS INPUT PARAMETERS								
Rated Input Voltage	380V / 400V / 415V 3 Phase 4W							
Voltage Tolerance - Rectifier Input	380V (+25% to -45%) / 400V (+20% to -45%) / 415V(+15% to -45%) 3 Phase 4W							
Voltage Tolerance - Bypass Input	Rated voltage -15% / +10%							
Rated Input Frequency	40 - 70 Hz							
Frequency Tolerance	Rated Frequency +/- 10% (Bypass)							
Input Power Factor @ 100% Load	> 99%							
Input Current Harmonic Distortion (THDI)	< 3%							
Rectifier Soft Start	Built-in							
Internal Backfeed Protection	Built-in							
MODULAR OUTPUT PARAMETERS								
Rated Output Voltage Rating	220/380V, 230/400V, 240/415V (Configurable) 3 Phase + N							
Total Voltage Harmonic Distortion	< 1% (100% Linear load); < 5% (100% Non-linear load)							
Output Power Factor	0.9 Lagging							
Permitted Load Power Factor	0.8 Lagging to 0.8 Leading							
Overload on Inverter	102 ~ 110% For 10 minutes, 111 ~ 125% For 60 seconds, 126 ~ 150% For 10 seconds, > 150% Transfer to bypass immediately							
Overload on Bypass	< 125% For Continuous Operation, 1000% for 20m second							
BATTERY								
Battery Type	VRLA / GEL							
Temperature Compensation	Option							
Battery Nominal Voltage	384VDC -- 480VDC configurable							
Battery Quantity in Cell	192 Cells to 240 Cells (240 Cells as default)							
Charge Current Limit	10A per UPS Module							
Black/Battery Start Capability	Option							
COMMUNICATIONS								
Comm-slot	RS232 for LAN monitor & Communication, SNMP, JBUS, MODBUS and Expandable Dry Contacts							
Network / SNMP Interface	SNMP card, Built-in external Network Card (monitoring working environment), Relay card							
Monitor Module & Indicators	EPO Button (REPO), Touch Screen TFT Central Display, UPS Module LCD Display and LED Indicators							
Audible Alarm	Audible Alarm from Beeper							
ACCESSORIES								
Options	SNMP, Network Card, Relay Card External Battery Cabinet or Box c/w Breaker or Fuse Parallel Tie Cabinet, Parallel card (Distribution Confluence Cabinet) Input and / or Output Isolation Transformer / Lightning Protection Device / SPD							
STANDARDS COMPLIED								
Safety	IEC 62040-1 YD/T1095-2008							
EMC	IEC 62040-2							
Performance	IEC 62040-3							
PHYSICAL								
Cabinet Frame IP20	200kVA Frame, customized design as per request							
Rating	20kva to 200kVA per frame							
Dimension (W * D * H) in mm	600 * 840 * 1400 For 5 UPS Modules and 600 * 1100 * 2000 For 10 UPS Modules							
Approximate Net Weight in kg	210							
Building Block Components	1 to 10 Units of 20kVA UPS Modules + Monitor Module + Distributed Bypass + PDU							

Excellence MOD Series Scalable Modular AC UPS

Technical Specification - 3 Phase in / 3 Phase out

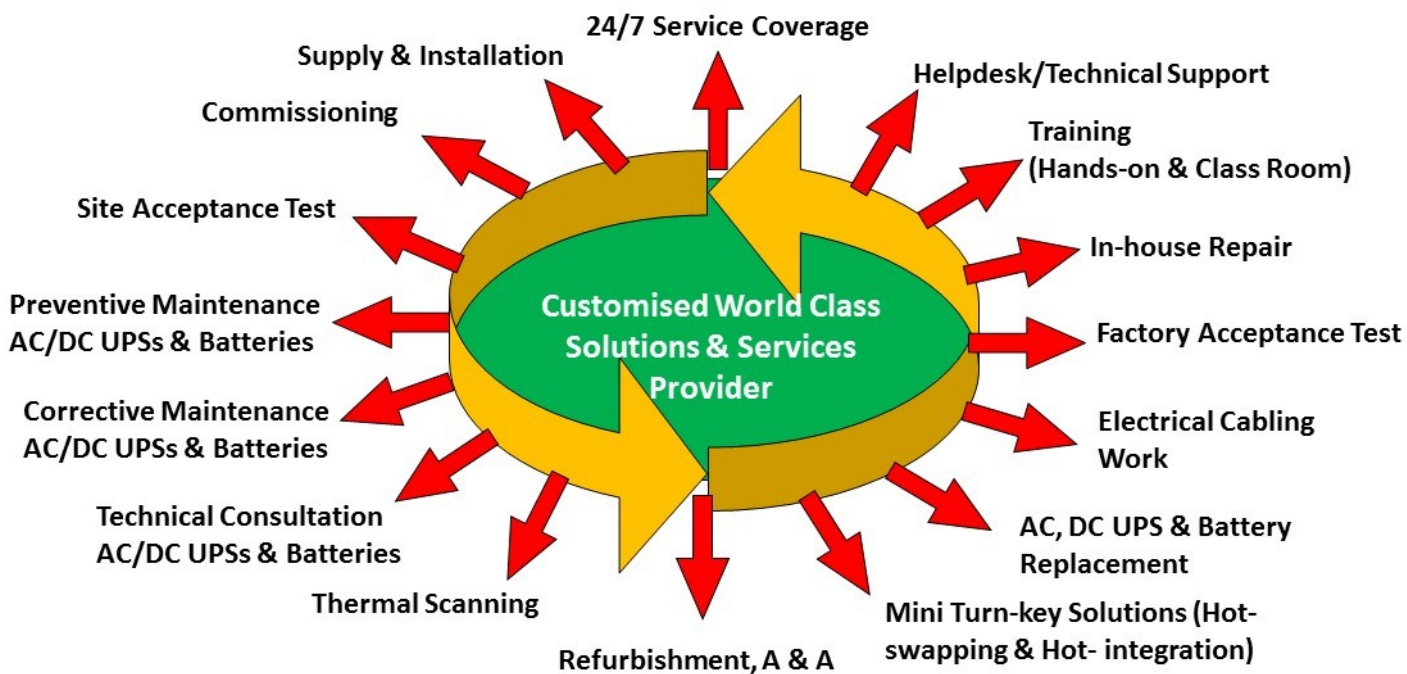
MODEL	MOD33030	MOD33090	MOD33150	MOD33180	MOD33210	MOD33240	MOD33270	MOD33300
CAPACITY in kVA / kW	30kVA/27kW	90kVA/81kW	150kVA/135kW	180kVA/162kW	210kVA/189kW	240kVA/216kW	270kVA/243kW	300kVA/270kW
SYSTEM								
System Efficiency @ DCM (Double Conversion Mode)	95%							
System Efficiency @ ESM (Energy Saver Mode)	98%							
Static Bypass Rating	30kVA to 300kVA (Distributed Static Bypass)							
External Paralleling	Up to 4 Cabinets can be paralleled							
UPS Topology	Double Conversion							
IP Rating	IP 20 As Standard (Option: Up to IP42 is available upon request)							
Acoustic noise at 1 m, in 25 °C Ambient Temperature	< 70 dBA in DCM, < 55 dBA in ESM							
Altitude (Maximum)	Within 1000m above sea level at 40 °C, Every 100m increase, Capacity decrease 1%, Maximum 2000m							
Cable Entry	Rare Bottom (Customization is available upon request)							
MODULAR UPS INPUT PARAMETERS								
Rated Input Voltage	380V / 400V / 415V 3 Phase 4W							
Voltage Tolerance - Rectifier Input	380V (+25% to -45%) / 400V (+20% to -45%) / 415V(+15% to -45%) 3 Phase 4W							
Voltage Tolerance - Bypass Input	Rated voltage -15% / +10%							
Rated Input Frequency	40 - 70 Hz							
Frequency Tolerance	Rated Frequency +/- 10% (Bypass)							
Input Power Factor @ 100% Load	> 99%							
Input Current Harmonic Distortion (THDI)	< 3%							
Rectifier Soft Start	Built-in							
Internal Backfeed Protection	Built-in							
MODULAR OUTPUT PARAMETERS								
Rated Output Voltage Rating	220/380V, 230/400V, 240/415V (Configurable) 3 Phase + N							
Total Voltage Harmonic Distortion	< 1% (100% Linear load); < 5% (100% Non-linear load)							
Output Power Factor	0.9 Lagging							
Permitted Load Power Factor	0.8 Lagging to 0.8 Leading							
Overload on Inverter	102 ~ 110% For 10 minutes, 111 ~ 125% For 60 seconds, 126 ~ 150% For 10 seconds, > 150% Transfer to bypass immediately							
Overload on Bypass	< 125% For Continuous Operation, 1000% for 20m second							
BATTERY								
Battery Type	VRLA / GEL							
Temperature Compensation	Option							
Battery Nominal Voltage	384VDC -- 480VDC configurable							
Battery Quantity in Cell	192 Cells to 240 Cells (240 Cells as default)							
Charge Current Limit	10A per UPS Module							
Black/Battery Start Capability	Option							
COMMUNICATIONS								
Comm-slot	RS232 for LAN monitor & Communication, SNMP, JBUS, MODBUS and Expandable Dry Contacts							
Network / SNMP Interface	SNMP card, Built-in external Network Card (monitoring working environment), Relay card							
Monitor Module & Indicators	EPO Button (REPO), Touch Screen TFT Central Display, UPS Module LCD Display and LED Indicators							
Audible Alarm	Audible Alarm from Beeper							
ACCESSORIES								
Options	SNMP, Network Card, Relay Card External Battery Cabinet or Box c/w Breaker or Fuse Parallel Tie Cabinet, Parallel card (Distribution Confluence Cabinet) Input and / or Output Isolation Transformer / Lightning Protection Device / SPD							
STANDARDS COMPLIED								
Safety	IEC 62040-1 YD/T1095-2008							
EMC	IEC 62040-2							
Performance	IEC 62040-3							
PHYSICAL								
Cabinet Frame IP20	300kVA Frame, customized design as per request							
Rating	30kva to 300kVA per frame							
Dimension (W * D * H) in mm	600 * 840 * 1400 For 5 UPS Modules and 600 * 1100 * 2000 For 10 UPS Modules							
Approximate Net Weight in kg	320							
Building Block Components	1 to 10 Units of 30kVA UPS Modules + Monitor Module + Distributed Bypass + PDU							

Excellence MOD Series Scalable Modular AC UPS

Technical Specification - 3 Phase in / 3 Phase out

MODEL	MOD33040	MOD33160	MOD33200	MOD33240	MOD33280	MOD33320	MOD33360	MOD33400
CAPACITY in kVA / kW	40kVA/36kW	160kVA/144kW	200kVA/180kW	240kVA/216kW	280kVA/252kW	320kVA/288kW	360kVA/324kW	400kVA/360kW
SYSTEM								
System Efficiency @ DCM (Double Conversion Mode)	95%							
System Efficiency @ ESM (Energy Saver Mode)	98%							
Static Bypass Rating	40kVA to 400kVA (Distributed Static Bypass)							
External Paralleling	Up to 4 Cabinets can be paralleled							
UPS Topology	Double Conversion							
IP Rating	IP 20 As Standard (Option: Up to IP42 is available upon request)							
Acoustic noise at 1 m, in 25 °C Ambient Temperature	< 70 dBA in DCM, < 55 dBA in ESM							
Altitude (Maximum)	Within 1000m above sea level at 40 °C, Every 100m increase, Capacity decrease 1%, Maximum 2000m							
Cable Entry	Rare Bottom (Customization is available upon request)							
MODULAR UPS INPUT PARAMETERS								
Rated Input Voltage	380V / 400V / 415V 3 Phase 4W							
Voltage Tolerance - Rectifier Input	380V (+25% to -45%) / 400V (+20% to -45%) / 415V(+15% to -45%) 3 Phase 4W							
Voltage Tolerance - Bypass Input	Rated voltage -15% / +10%							
Rated Input Frequency	40 - 70 Hz							
Frequency Tolerance	Rated Frequency +/- 10% (Bypass)							
Input Power Factor @ 100% Load	> 99%							
Input Current Harmonic Distortion (THDI)	< 3%							
Rectifier Soft Start	Built-in							
Internal Backfeed Protection	Built-in							
MODULAR OUTPUT PARAMETERS								
Rated Output Voltage Rating	220/380V, 230/400V, 240/415V (Configurable) 3 Phase + N							
Total Voltage Harmonic Distortion	< 1% (100% Linear load); < 5% (100% Non-linear load)							
Output Power Factor	0.9 Lagging							
Permitted Load Power Factor	0.8 Lagging to 0.8 Leading							
Overload on Inverter	102 ~ 110% For 10 minutes, 111 ~ 125% For 60 seconds, 126 ~ 150% For 10 seconds, > 150% Transfer to bypass immediately							
Overload on Bypass	< 125% For Continuous Operation, 1000% for 20m second							
BATTERY								
Battery Type	VRLA / GEL							
Temperature Compensation	Option							
Battery Nominal Voltage	384VDC -- 480VDC configurable							
Battery Quantity in Cell	192 Cells to 240 Cells (240 Cells as default)							
Charge Current Limit	10A per UPS Module							
Black/Battery Start Capability	Option							
COMMUNICATIONS								
Comm-slot	RS232 for LAN monitor & Communication, SNMP, JBUS, MODBUS and Expandable Dry Contacts							
Network / SNMP Interface	SNMP card, Built-in external Network Card (monitoring working environment), Relay card							
Monitor Module & Indicators	EPO Button (REPO), Touch Screen TFT Central Display, UPS Module LCD Display and LED Indicators							
Audible Alarm	Audible Alarm from Beeper							
ACCESSORIES								
Options	SNMP, Network Card, Relay Card External Battery Cabinet or Box c/w Breaker or Fuse Parallel Tie Cabinet, Parallel card (Distribution Confluence Cabinet) Input and / or Output Isolation Transformer / Lightning Protection Device / SPD							
STANDARDS COMPLIED								
Safety	IEC 62040-1 YD/T1095-2008							
EMC	IEC 62040-2							
Performance	IEC 62040-3							
PHYSICAL								
Cabinet Frame IP20	400kVA Frame, customized design as per request							
Rating	40kVA to 400kVA per frame							
Dimension (W * D * H) in mm	600 * 1100 * 2000 For 10 UPS Modules							
Approximate Net Weight in kg	430							
Building Block Components	1 to 10 Units of 40kVA UPS Modules + Monitor Module + Distributed Bypass + PDU							

3P Power One Stop Solution



3P Power

Passion Profession Perfection

3P Power Pte Ltd

1 UBI View, #04-21

Focus One Singapore 408555

T +65 743 1006 & +65 6635 7632

F +65 6634 1129

E enquiry@3ppower.com

W www.3ppower.com

Offices

- Singapore
- Myanmar