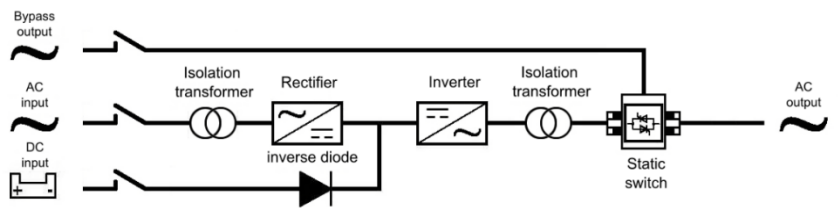




Industrial UPS Online Frequency

3Ph 20kVA-120kVA



- Dual conversion Online Frequency, Pure sine wave output, Highest critical load protection
- Durable and reliable industrial design
- Strong load handling, capable of load jump from 0 to 100%.
- Wide input voltage design, excellent grid adaptability
- Standard input isolation transformer, optional output transformer
- Battery black start function
- Lightning protection and surge protection as standard
- Static Transfer Switch (STS) or Change Over Switch (COS) Hard Bypass option
- Intelligent monitoring function, standard RS485 communication, optional backup SNMP card
- Optional HMI touch LCD & panel indicators

Indonesia reps:

PT Modular Energy Indonesia

BSD city Taman Tekno-X no B-10,
Tangerang Selatan, Banten

info@modularenergy.id

www.modularenergy.id

Basic specification

Output Power		20 KVA	60 KVA	120 KVA
Input	AC input Voltage	AC380V±25%	AC380V±25%	AC380V±25%
	DC input Voltage	DC220V / DC192V / DC110V		
	Frequency	50Hz±10%		
Output	Output Voltage	AC220V±1%		
	Frequency	50Hz±0.5%		
	Wave Form	100% pure sine wave, linear load harmonic distortion rate<3%		
	Overload response	plus-minus protection		
	Power Factor	0.8		
	Crest Factor	3:01		
	Efficiency	≥90%		
	Transfer Time	<5ms		
Protection	Reverse polarity	Trip and Sound & light alarm		
	Overload	First level sound and light alarm, second level automatic bypass output after 60s, automatically restored after reducing load		
	Short Circuit & Fault	System automatically switches to bypass output, sound and light alarm		
	Electromagnetic immunity/compatibility	Meet GB 7260.2		
Display	LCD screen	Input/output Parameters, Voltage, Current, Frequency, etc		
	Indicator	Inverter state, output state, overload, fault		
Alarm	AC input, DC input, Bypass Abnormal	Sound and light alarm. Beep and display screen alarm simultaneously		
	Overload	First level protection sound and light alarm, second level protection sound and light alarm		
	System Failure	long-beep		
Input/Output	Communication	RS485 Modbus standard Protocol		
	Dry Contact	Inverter state, bypass state, fault+AC abnormality, DC abnormality, device overload+backup		
Environment	Working Temperature	-5℃~40℃		
	Relative Humidity	0-95% No condensation		
	Insulation Strength	1500VAC 1min(input/output)		
	Cooling Method	Forced Fans Cooling		
Dimension		509*267*469mm	509*356*469mm	Customized

Battery Selection



Lithium BESS

Multiply of 30 & 50 kWh
48-786 VDC
LiFePO4 cells
0.5-1C discharge Amp
20~40°C operation



Sodium BESS

Multiply of 15 kWh
48-557 VDC
Sodium-Nickel-Chloride cells
0.5-3C rate Amp
UL9540A fire safety



UL 9540A



Ni-Zn BESS

Multiply of 38 & 46 kWh
48-786 VDC
Nickel-Zinc Cells
0.5-10C discharge Amp
-20~50°C operation
UL9540A fire safety



UL 9540A



IBC2018



Lead Acid

Multiply of 1.2 kWh
12-196 VDC
VRLA cells
0.5-3C rate Amp

Enclosure Selection



Indoor 19" rack



Outdoor cabinet with
Forced Air cooling



Containerized with Air
Conditioning

Space Optimization

with Battery Energy Storage System

Space optimization benefit can have trickle down effect to other support system such as HVAC, lighting, fire system, etc



VRLA
Battery Rack



Ni-Zn
BESS Cabinet



Lithium LFP
BESS Cabinet

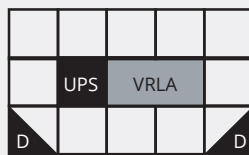
UPS & batteries in
typical footprints

*Example configuration

**10-60kVA UPS
Branch Site
Server rack**

10 min backup*

VR
LA



Ni
Zn



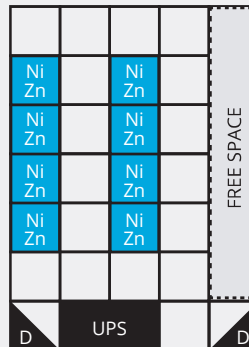
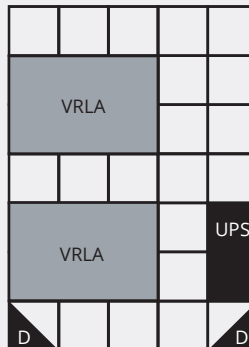
LFP



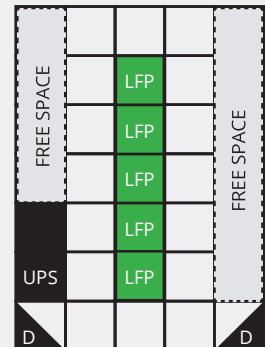
*UPS+LFP battery in
the same cabinet

**90-600kVA UPS
Edge data
center**

8 min backup*



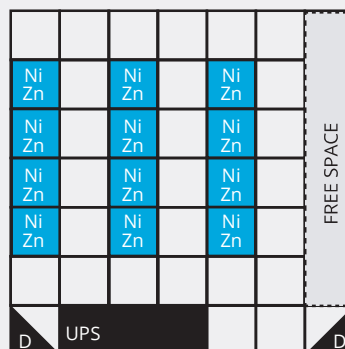
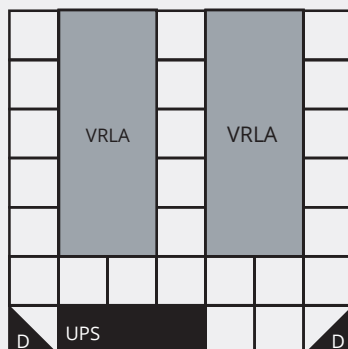
*BESS cabinet only
need front access



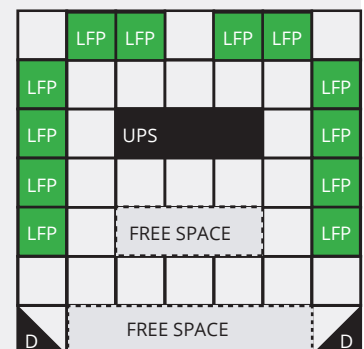
*BESS cabinet only
need front access

**0.8-1.2MVA UPS
Tier-1 data
center**

6 min backup*



*BESS cabinet only
need front access



*BESS cabinet only
need front access

*footprint multiplication will increase significantly with higher Tier system

*dimension in multiplication of 0.8 x 0.8 m square