

AVO RM SERIES

10KVA-20KVA (3:1)

Features

- Rack/Tower convertible design
- Online double conversion
- Wide input voltage range: 138-485Vac
- Input power factor 0.95 with PFC
- selectable output voltage: 200/220/230/240Vac
- smart charger design for optimized battery performance
- Emergency power off function (EPO)
- ECO mode operation for energy saving
- Generator compatible
- Hot-Swappable battery design
- Cold start
- Intelligent fan speed regulation
- Load segment settable (Optional)
- Versatile LCD human-computer interface
- Multiple communication interface: RS232 (USB/EPO/Dry contact/SNMP card optional)
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and overdischarge, output low voltage and fan fault alarm



MODEL	10KVAH	15KVAH	20KVAH
Capacity (VA/Watts)	10000VA/9000W	15000VA/13500W	20000VA/18000W
Rating	10KVA	15KVA	20KVA
Technology	IGBT based double conversion PWM based online UPS		
Parallel mode	2 (N+1)		
Form Factor	Rack/Tower Convertible		
INPUT			
System Rated Voltage	400VAC 3-phase,4-wire or 230 VAC 1- ph 3 wires		
Voltage Range	Three phase 138VAC -485VAC		
Rated Frequency	50Hz/60Hz		
Frequency Range	40Hz ~ 70Hz		
Power Factor	0.95		
OUTPUT			
Rated power	10kVA/9kW	15kVA/13.5kW	20kVA/18kW
Output Voltage	Single phase, 230VAC		
Frequency synchronization range	Rated frequency±3Hz. Configurable range: ±0.5Hz ~ ±5Hz		
Rated Power Factor	0.9		
Crest Factor	03:01		
Voltage Harmonic Distortion	<= 2% (linear load)		
Voltage Regulation	1%		
Wave form	Pure Sinewave		
Dynamic response recovery time	60ms		
Inverter Overload Capability on utility mode	At 25°C: 105% ~ 125%- 2min; 125% ~ 150%-30Sec		
Static bypass	Inbuilt		
EFFICIENCY			
Online mode (AC-AC)	94% or above		
BATTERY			
Type	SMF-VRLA/ Li-Ion		
Rated Voltage	192VDC /240VDC		
Battery charging capacity	8A		
Transfer Time			
Mains - Battery	0ms		
Inverter-Bypass	Synchronous Transfer: ≤0 msec; Asynchronous transfer default: ≤20mSec		

Noise	
Acoustic Noise level	<65db
Panel display mode	
Display type	Graphical LCD display
Parameter	Input-Voltage /Current /Power /Output Voltage/ Current/Power /Load% Battery Voltage / Current etc.
Environmental parameter	
Operating temperature	0°C ~ 50°C (75% efficiency above 40°C)
Storage temperature	-40°C ~ +70°C (battery excluded); - 25°C ~ +55°C (battery included)
Relative humidity	5%RH ~ 95%RH, non-condensing
Altitude	≤1000m; derating when higher than 1000m
Weight (Kg)	≤30 Kg
Ventilation	Forced -air cooled
Ingress protection level	IP20
Color	Powder coated Black Texture finish
Cable entry	Rear
UPS & Battery Cabinet	Separate Cabinet for UPS and External Cabinet of Battery Bank for 12 V VRLA SMF battery
Network Management	
Smart RS232/USB	Supports latest Windows, Linux, Unix and MAC
Webpage monitoring	Inbuilt/ External for web monitoring
MODBUS	Inbuilt via multifunction port/External
Dry Contacts	Inbuilt / External for battery low, fault, mains fail, emergency
Optional SNMP	Power management from SNMP manager and web browser
Certifications	
Safety (CE)	IEC/EN62040-1
Electromagnetic Compatibility (EMC)	IEC/EN62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12
Surge Protection	IEC/EN62040-2, meeting IEC/EN61000-4-5
ROHS	Yes
Quality standard	ISO 9001
Environment standard	ISO 14001
OSHAS	ISO 45001
BIS	Yes

AVO has developed state of the art and very customized web based e-CFM for all its service operations. The unique software allows the Clients to log the call themselves. The Best feature of the software is it automatically delegates the calls to the field engineers depending upon the database of engineers as per location & pas; records and subsequently tracks the engineer location and site location through GPS. Customers get automated mails on current progress and are also able to track the engineer who is going to attend the call. An SMS alert to update the call status is also sent to the customer.

