



Modulera

Modular UPS 3 Phase In - 3 Phase Out / 20 - 200 kVA

- Hot Swappable Decentralized Parallel Architecture
- DSP (Digital Signal Processor) Controlled Technology
- Modular N+X Parallel Redundancy
- Plug & Play Type Hot Swappable Power Modules
- Cold Start Function
- Parallel connection availability of UPS Frames up to 4pcs
- Wide Input Voltage Window (208Vac ~ 478Vac)
- Wide input frequency range (40Hz – 70Hz)
- High Overall Efficiency (up to 96%)
- Increased Output Power Factor (PF:1)
- Unity Input Power Factor (PF: 1)
- Low Input Total Harmonic Distortion Level (THDi down to 3 %)
- Fit into standard 19" Rack Cabinet
- Touch-screen LCD display for user's friendly operation
- EPO (Emergency Power Off)
- Smart Fan Speed Control
- Programmable Battery Voltage (32/ 34 / 36 / 38 / 40 blocks of 12V Batteries)
- Three Level Battery Charge system with smart charge current adjustment
- Powerful charger built in each Modular UPS Power Module
- Equip with Maintenance Bypass Switch for easy maintenance
- RS232 & 485 Ports as standard communication
- Megatec/Mod Bus protocol supported
- Optional Communication Interfaces (SNMP Card, Dry Contact Board, EPO, TCP/IP, Modbus RTU, Modbus TCP, HTTP, SNTP, FTP, DHCP)



UPS ONLINE



MODULAR SYSTEM



LCD DISPLAY (20-200kVA)



SERVICE



Modulera

TECHNICAL SPECIFICATIONS

MODEL	MDL 3300-60K		MDL 3300-100K	MDL 3300-200K
Frame Capacity	20kW to 60kW		20kW to 100kW	20kW to 200kW
MDL Module Capacity			20KVA/20kW	
INPUT				
Phase	3Ph+N+PE			
Rated Voltage	380 / 400 / 415Vac			
Voltage Range	208 - 478Vac at 50% load, 305 - 478Vac at 100% load			
Frequency range	40Hz - 70Hz			
Power Factor	≥ 0.99			
Current THDi	down to 3%			
Generator Input	Present			
OUTPUT				
Phase	3Ph+N+PE			
Rated Voltage	380/400/415Vac			
Power Factor	1			
Voltage Regulation	<±1%			
Frequency	Utility Mode	±1%, ±2%, ±4%, ±5%, ±10% of the rated frequency(optional)		
	Battery Mode	(50/60 ±%0.2)Hz		
Crest Factor	3:1			
THDv	≤2% with linear load			
Waveform	Pure Sinewave			
Over Load	AC Mode	100% - 110%: 60min, 110% - 125%: 10min, 125% - 150%: 1min, ≥150%: immediately transfers to bypass		
	Bat. Mode	100% - 110%: 60min, 110% - 125%: 10min, 125% - 150%: 1min, ≥150%: immediately shutdown		
	Bypass Mode	Breaker (40Amp)		
AC-AC Efficiency	Up to 96%			
Eco-Mode Efficiency	98%			
BATTERY				
Type	Maintenance-free lead acid batteries			
Quantity (12V VRLA batteries)	Configurable to 32/34/36/38/40 pcs per string			
Voltage (12V VRLA batteries)	384/408/432V/456V/480V DC			
Charging Current	Frame	18A Max. (charge current can be set according to battery capacity installed)	30A Max. (charge current can be set according to battery capacity installed)	60A Max. (charge current can be set according to battery capacity installed)
	MDL Module	6A Max. (charge current can be set according to battery capacity installed)		
DISPLAY				
Status LED & LCD	Line Mode, Eco Mode, Bypass Mode, Battery Low, Battery Bad, Overload & UPS Fault			
Reading On the LCD	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage & Inner Temperature			
PROTECTION				
Short Circuit	Hold Whole System			
Overheat	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately			
Battery Low	Alarm and Switch off			
Self-diagnostics	Upon Power On and Software Control			
EPO (optional)	Shut down UPS immediately			
Battery	Advanced Battery Management			
Noise Suppression	Complies with EN62040-2			
Alarms	Line Failure, Battery Low, Overload, System Fault			
COMMUNICATION				
Standard	1xRS232 Communication port, 2xRS485 Communication ports, 1xModBus port, 2xCommunication Slot			
Optional	SNMP (MegaTec Protocol), Dry Contact Board, EPO, TCP/IP, Modbus RTU, Modbus TCP, HTTP, SNMP, FTP, DHCP			
ENVIRONMENT				
Operating Temperature	-10°C / +40°C			
Storage Temperature	-30°C / +75°C			
Humidity / Altitude	0 - 95% non condensing / < 1000m			
Case Protection Degree	IP 21			
Noise	<60dBA (at 1 meter)			
PHYSICAL SPECIFICATIONS				
Dimensions (WxDxH)	MDL Module	443 x 580 x 131- 3U (for all frames)		
	Frame	600x840x1400		600x1100x2000
Weight - Without Batteries (kg)	MDL Module	31		
	Frame	150	152	290
STANDARDS				
CE, EN/IEC 62040-2, EN/IEC 62040-1-1, EN/IEC 62040-3 (VFI SS 111), EN/IEC 62040-1-2018				