



X₆ Series MPi 5-100kVA

THREE-PHASE IN / SINGLE-PHASE OUT
DOUBLE CONVERSION ON-LINE INDUSTRIAL UPS



The MPi UPS series is designed to offer a cost effective product with the most advanced technology in industrial power supply applications.

The MPi system is an on-line double conversion UPS, designed to protect AC loads from any disturbances from the AC mains power supply.

The MPi UPS is fully compatible with all types of batteries (vented or sealed; lead-acid or Ni-Cd).

The power conversion to AC stabilized voltage is monitored by means of IGBT modules, assuring high performance in terms of efficiency, harmonic distortion and voltage stability.

The modular and flexible design allows easy configuration of the system according to the customer technical requirements.

The system is provided with a digital mimic control panel, displaying the operational status of the equipment (signals, alarms, meters, history events). Serial interfaces are available for remote control of the UPS. Upon request supervision application software is available for monitoring via PC.

MAIN FEATURES

- Industrial layout
- Easy maintenance/front access
- LCD multifunctional mimic control panel
- IGBT Technology (PWM)
- Microprocessor control & supervision
- Large size (up to 100kVA) in reduced space
- Input galvanic isolation
- Reduced output THD with non linear load
- Remote monitoring via SPDT contacts
- EPO (Emergency Power Off)

MAIN OPTIONS

- Bypass line isolation transformer & AC/AC voltage regulator
- Additional input THD filters
- Redundant ventilation
- 12 pulse rectifier
- Active parallel redundant and parallel hot-standby configuration (n+1 units)
- AC & DC distribution panels
- External EEXD battery protection box
- AC & DC earth fault alarm
- Internal lighting
- Internal heater
- Temperature compensation of battery voltage
- Remote monitoring via PC/RS232/RS485
- MODBUS protocol
- SNMP protocol
- 3Ph Output MPi model

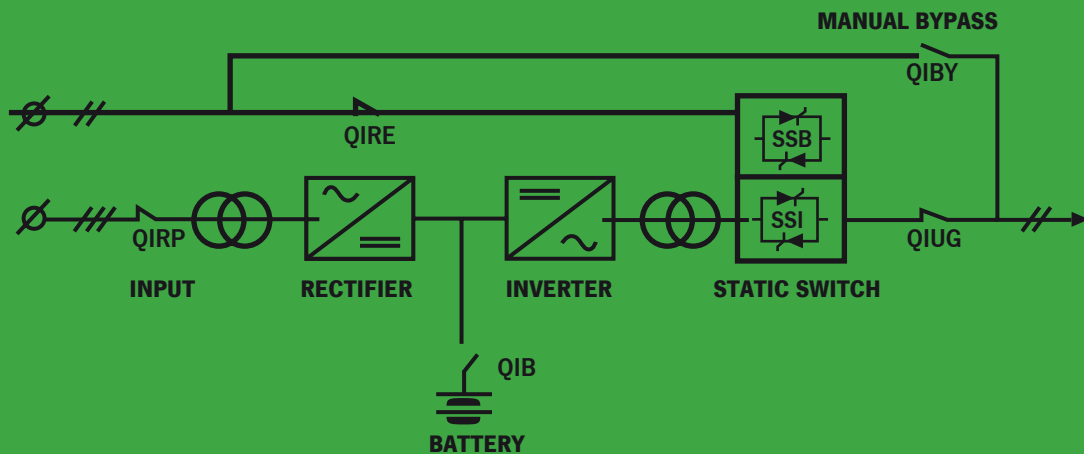


Technical Specifications:

INPUT	110MPI-5	110MPI-10	110MPI-15	110MPI-20	110MPI-30	110MPI-40	110MPI-50	220MPI-5	220MPI-10	220MPI-15	220MPI-20	220MPI-30	220MPI-40	220MPI-50	220MPI-60	220MPI-80	220MPI-100	
Size (kVA) cosphi = 0.8	5	10	15	20	30	40	50	5	10	15	20	30	40	50	60	80	100	
Input Voltage Vac	3Ph. 400 +/- 15 % (other as option) 50 - 60Hz +/- 5 %																	
By pass Line Input Voltage	1Ph. 230Vac or 115Vac +/- 10 % (according to inverter output voltage)																	
Battery Voltage	110Vdc (Range 95-165 Vdc)							220Vdc (Range 176-325 Vdc)										
Output Voltage	1Ph. 230Vac or 115Vac (other as option)																	
Harmonic Distortion	<1.5 % with linear load <5% with non linear load as per standard																	
Crest Factor	3:1 without derating																	
Frequency	50-60Hz (selectable) with variation range +/-2Hz																	
Overload	125 % for 10 min. - 150 % for 1min. Pn (load on inverter) 150 % Pn continuous (load on by pass line)																	
Static Stability	+/-1 % (load on inverter)																	
Dynamic Stability	+/-5 % with recovery to 2 % in 40ms																	
Efficiency (%)	79	81	82	83	83	84	84	81	83	85	85	86	87	87	88	88	88	
Noise level 1m (dBA)	<65																	
Dimensions (mm)	W	800	800	800	1400	1400	1800	1800	800	800	800	1400	1400	1400	1400	1800*	1800*	1800*
	H	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
	D	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800
Weight (kg)	450	500	600	650	820	900	1000	450	500	600	650	750	830	920	1050	1140	1300	
Protection degree	IP20 (other as option)																	
Color	RAL 7035 (other RAL, BS standard, Munsell as option)																	
Operating Temperature	0-40°C																	
Operating Altitude	1000 mt. without derating																	

* 2200 with 110Vac output

ONE LINE DIAGRAM



STANDARDS

Low voltage assemblies	IEC EN 60439-1, EN 60439-2, EN 60439-3
Semiconductor convertors	IEC EN 60146-1-1, EN 60146-1-3, EN 60146-2
Power transformers	IEC EN 60076
Degree of protection	IEC EN 60529
Safety (CE marking)	IEC EN 62040-1
Electromagnetic compatibility (CE marking)	IEC EN 62040-2
Test and performance	IEC EN 62040-3