MODEL	MXR1K0MM	MXR1K0MM-KS	MXR2K0MM	MXR2K0MM-KS	MXR3K0MM	MXR3K0MM-KS
Power	1000 VA / 1000 W		2000 VA / 2000 W		3000 VA / 3000 W	
MAIN INPUT						
Grid system	1 PH + N + PE					
Rated voltage / Frequency	200/208/220/230/240 VAC (derating 10% at 208 V, derating 20% at 200 V), 50/60 Hz					
Voltage range	160-300 V 100% load, 110-160 V derating to 50% load linearly					
Frequency range	40 Hz - 70 Hz (45 Hz - 55 Hz, 54 Hz - 66 Hz @ load > 60%)					
Power factor	>0,99					
Current THDi	<5%					
OUTPUT						
Rated voltage / Frequency	200/208/220/230/240 VAC (derating 10% at 208 V, derating 20% at 200 V), 50/60 Hz					
Power Factor	1					
Wave form	Pure sine wave					
Voltage THDv	<1% (linear load); <5% (non-linear load)					
Voltage accuracy	±1%					
Transient recovery	Compliant to EN62040-3 VFI-SS-313 Standard					
Inverter Overload	100% < load ≤ 105%, continuous 105% < load ≤ 125%, 5 minute 125 < load ≤ 150%, 30 seconds > 150%, 500 ms					
Bypass Overload	100% < load ≤ 105%, continuous 105% < load ≤ 125%, 5 minute 125 < load ≤ 150%, 30 seconds > 150%, 500 ms					
Frequency regulation (Battery mode)	50/60 Hz ±0.1%					
Crest factor	3:1					
BATTERIES						
Battery type	Pb					
Battery capacity	12 V / 7 Ah	Selectable	12 V / 7 Ah	Selectable	12 V / 9 Ah	Selectable
Number of batteries in series	3		6		6	
Battery rate voltage	36 VDC		72 VDC		72 VDC	
Backup time*	7,5 min full load 10 min typical load	NA	8 min full load 10,5 min typical load	NA	6 min full load 9 min typical load	NA
BATTERY CHARGER						
Charging current	1.5 A	Adjustable 2 ~ 8 A	1.5 A	Adjustable 2 ~ 8 A	1.5 A	Adjustable 2 ~ 8 A
Charging time	3 h to recover 90% capacity	Depending on external batteries capacity	3 h to recover 90% capacity	Depending on external batteries capacity	3 h to recover 90% capacity	Depending on external batteries capacity
SYSTEM						
Efficiency	Normal operation: 91% Eco Mode operation: 96% Battery operation: 86.5%		Normal operation: 94% Eco Mode operation: 97% Battery operation: 89%		Normal operation: 94% Eco Mode operation: 97% Battery operation: 89%	
Display	LCD					
Protection degree	IP20					
Interface	Standard equipment: USB, RS232, RPO, Intelligent slot Optional: SNMP, dry contacts, parallel kit, Modbus					
ENVIRONMENT						
Operating temperature	0 ~ 40°C					
Storage temperature	0°C ~ 40°C (with battery, suggest to storage the battery below 25°C) -25°C ~ 55°C (without battery)					
Relative humidity	0 ~ 95% (no condensing)					
Noise (dBA at 1 meter far)	<45 dB		<50 dB			
Altitude	0 ~ 3000 m; load derated 1% per 100m, from 1000 ~ 3000m					
MECHANICAL DATA						
Dimensions W*D*H (mm)	438*445*85.5 (2U)		438*600*85.5 (2U)			
Weight (Kg)	14,3	8	23,3	10,6	26,2	11
Color	Black					

Note: technical specifications and data could be changed without notification

* For OnLine UPS typical load is 70% PF 0,8, full load is 70% PF 1

MODEL	MXR6K0MM+BP167	MXR6K0MM-KS	MXR010MM+BP209	MXR010MM-KS	MXR010TM+BP209*	MXR010TM-KS*
Power	6 KVA / 6 KW		10 KVA / 10 KW		10 KVA / 10 KW	
MAIN INPUT						
Grid system	1 PH + N + PE				3 PH + N + PE	
Rated voltage / Frequency	220/230/240 VAC, 50/60 Hz					
Voltage range	160-275 V 100% load, 110-160 V derating to 50% load linearly					
Rated current**	34 A	42 A	54 A	65 A	54 A (1-1) L1 48 A - L2/L3 18 A (3-1)	61 A (1-1) L1 51 A - L2/L3 21 A (3-1)
Frequency range	≤60% rated load: 40-70 Hz Rated load: 45-55 Hz (50 Hz system) / 54-66 Hz (60 Hz system)					
Power factor	>0,99				>0,95	
Current THDi	<3% Linear load <5% non linear load				<30% at 3 phase input <5% at 1 phase input	
OUTPUT						
Rated voltage / Frequency	220/230/240 VAC, 50/60 Hz					
Power Factor	1					
Wave form	Pure sine wave					
Voltage THDv	<1% (linear load); <5% (non-linear load)					
Voltage accuracy	±1%					
Transient recovery	Compliant to EN62040-3 VFI-SS-111 Standard					
Inverter overload	100% < load ≤ 105%, continuous 105% < load ≤ 125%, 10 minute 125 < load ≤ 150%, 30 seconds > 150%, 500 ms					
Bypass overload	100% < load ≤ 105%, continuous 105% < load ≤ 125%, 10 minute 125 < load ≤ 150%, 30 seconds > 150%, 500 ms					
Frequency regulation (Battery mode)	50/60 Hz ±0.1%					
Crest factor	3:1					
BATTERIES						
Battery type	Pb					
Battery capacity	12 V / 7 Ah	Selectable	12 V / 9 Ah	Selectable	12 V / 9 Ah	Selectable
Number of batteries in series	16***		20****			
Battery rate voltage	192 VDC		240 VDC		240 VDC	
Backup time (with standard number of batteries)*****	6 min full load 9 min typical load	Depending on external batteries capacity	7 min full load 9 min typical load	Depending on external batteries capacity	7 min full load 9 min typical load	Depending on external batteries capacity
BATTERY CHARGER						
Charging current	Range: 1~4 A Default: 1,4 A	Range: 2~12 A Default: 4 A	Range: 1~4 A Default: 2 A	Range: 2~12 A Default: 4 A	Range: 1~4 A Default: 2 A	Range: 2~12 A Default: 4 A
Charging time (2.1 A recharging current)	3 h to recover 90% capacity	Depending on external batteries capacity	3 h to recover 90% capacity	Depending on external batteries capacity	3 h to recover 90% capacity	Depending on external batteries capacity
SYSTEM						
Efficiency	Normal operation: 94.9% Eco Mode operation: 98.6% Battery operation: 92.9%		Normal operation: 94.6% Eco Mode operation: 98.7% Battery operation: 91.8%		Normal operation: 94.6% Eco Mode operation: 98.8% Battery operation: 91.8%	
Display	LCD					
Protection degree	IP20					
Interface	Standard equipment: USB, RS232, RPO, Intelligent slot Optional: SNMP, dry contacts, parallel kit, Modbus					
ENVIRONMENT						
Operating temperature	0°C ~ 50°C (Derating 50% above 40°C)					
Storage temperature	-15°C ~ 40°C (with battery, suggest to storage the battery below 25°C) -25°C ~ 55°C (without battery)					
Relative humidity	0 ~ 95% (no condensing)					
Noise (dBA at 1 meter far)	<50 dB		<55 dB			
Altitude	0 ~ 3000 m; load derated 1% per 100m, from 1000 ~ 3000m					
MECHANICAL DATA						
Dimensions W*D*H (mm)	438*559* 215(5U) UPS + Battery cabinet	438*540*86.3(2U)	438*559* 215(5U) UPS + Battery cabinet	438*540*86.3(2U)	438*559* 215(5U) UPS + Battery cabinet	438*540*86.3(2U)
Weight (Kg)	59,4 UPS + Battery cabinet	13.6	76,2 UPS + Battery cabinet	15.5	76,5 UPS + Battery cabinet	15.8
Color	Black					

Note: technical specifications and data could be changed without notification

* The Matrix RT 10k 3:1 model can also operate in 1:1 mode

** 200 VAC input voltage / with Nominal Power

*** It's also possible to set 20 batteries in series at the factory, but the standard GTEC cabinet is not available for this configuration

**** It's also possible to set 16 batteries in series at the factory, but the standard GTEC cabinet is not available for this configuration

***** For OnLine UPS typical load is 70% PF 0,8, full load is 70% PF 1

MATRIX RT - BATTERY EXTENSIONS

MODEL	VDC	VOLTAGE (V) and CAPACITY (Ah)	NUMBER OF BATTERIES	TOTAL TIME IN MINUTES		DIMENSIONS W*D*H (mm)	MASS (Kg)
				TYPICAL*	FULL LOAD*		
BATTERY CABINET FOR MATRIX RT 1K							
MXRBP1K	36	Empty	Empty	-	-	438*445*85,5	8,8
MXRBP1K-037	36	12 V / 7 Ah	3	27	20	438*445*85,5	15,4
MXRBP1K-039	36	12 V / 9 Ah	3	29	23	438*445*85,5	16,3
MXRBP1K-067	36	12 V / 7 Ah	6	49	36	438*445*85,5	22
MXRBP1K-069	36	12 V / 9 Ah	6	52	39	438*445*85,5	23,8
BATTERY CABINET FOR MATRIX RT 2K							
MXRBP2-3K	72	Empty	Empty	-	-	438*600*85,5	9,9
MXRBP2-3K-067	72	12 V / 7 Ah	6	28	20	438*600*85,5	23,1
MXRBP2-3K-069	72	12 V / 9 Ah	6	31	24	438*600*85,5	24,9
MXRBP2-3K-127	72	12 V / 7 Ah	12	51	38	438*600*85,5	36,3
MXRBP2-3K-129	72	12 V / 9 Ah	12	54	41	438*600*85,5	39,9
BATTERY CABINET FOR MATRIX RT 3K							
MXRBP2-3K	72	Empty	Empty	-	-	438*600*85,5	9,9
MXRBP2-3K-067	72	12 V / 7 Ah	6	19	14	438*600*85,5	23,1
MXRBP2-3K-069	72	12 V / 9 Ah	6	23	17	438*600*85,5	24,9
MXRBP2-3K-127	72	12 V / 7 Ah	12	32	26	438*600*85,5	36,3
MXRBP2-3K-129	72	12 V / 9 Ah	12	37	28	438*600*85,5	39,9
BATTERY CABINET FOR MATRIX RT 6K							
MXRBP6K	192	Empty	Empty	-	-	438*559*129	10,9
MXRBP6K-167	192	12 V / 7 Ah	16	24	17	438*559*129	46,1
MXRBP6K-169	192	12 V / 9 Ah	16	27	21	438*559*129	50,9
BATTERY CABINET FOR MATRIX RT 10K							
MXRBP10K	240	Empty	Empty	-	-	438*559*129	11
MXRBP10K-207	240	12 V / 7 Ah	20	20	15	438*559*129	55
MXRBP10K-209	240	12 V / 9 Ah	20	24	18	438*559*129	61

Note: technical specifications and data could be changed without notification

* For OnLine UPS typical load is 70% PF 0,8, full load is 70% PF 1