

# MKD-RT Series

On-line double conversion  
700, 1000, 1500, 2000, 3000VA  
Racktower-Design

**NEU / NEW**

Now also XL models available  
with expandable batteries

Right: The feet supplied to make the  
MKD-RT stable tower unit.



Above: XL-Version

## Description

The MKD-RT is now available as a complete series in new design. It's EFFEKTA®'s high-end model in the field of high-quality microprocessor-based on-line double conversion UPS's for your IT environment or metrology and industrial plants.

The MKD-RT is already equipped with extensive and specific features, which are usually provided in the UPS market by most expensive special UPSs. The programmable switch contacts, or the adjustable restart function are just two of countless examples. The XL versions also offer the possibility of battery extension.



The MKD-RT can be used as 19" rack mount 2U device in any standard 19" rack after attaching the included 19" mounting angles. To make this possible, the clear LCD display can be rotated by 90°.

## Properties

- UPS Classification VFI-SS-111 (IEC 62040-3)
- Can be used as tower as well as 19"-unit
- User-friendly swivel LCD display
- Optional XL version with expandable batteries
- Wide input voltage range (120-276VAC)
- Excellent power factor of 0.9
- Online double conversion with sinusoidal output switchable to ECO mode (line interactive)
- Microprocessor controlled
- Automatic frequency detection
- Output frequency preset (frequency converter function)
- Extensive communication & control:
  - RS-232 as standard
  - USB as standard
  - Programmable switch contacts as standard
  - Emergency power-off „EPO“ as standard
- Slot for another optional adapter: Relay board or SNMP
- Management software for all popular OS
- 24 months' warranty



Top left: MKD 700-2000 RT rear view  
Bottom left: MKD 3000 RT rear view

With existing standard RS232 and USB interface as well as standard emergency contact (EPO) and individually programmable dry contacts (DRY IN / OUT DRY) the MKD RT provides extraordinarily extensive communication and control. And yet even this can be extended by additional optional adapter slot (SNMP, relay card).

## Specifications

Model		MKD 700 RT		MKD 1000 RT		MKD 1500 RT		MKD 2000 RT		MKD 3000 RT			
		Standard	XL	Standard	XL	Standard	XL	Standard	XL	Standard	XL		
<b>Power</b>	Power(VA) max	700		1000		1500		2000		3000			
	Power(W) max	630		900		1350		1800		2700			
<b>Back-up time</b> (XL-models expandable)	@ 100% load in min.	app. 10	**	app. 5	**	app. 4	**	app. 4	**	app. 4	**		
	@ 50% load in min.	app. 30		app. 15		app. 13		app. 10		app. 10			
<b>Input</b>	Cold Start	yes, default frequency=50Hz											
	Acceptable Input Voltage	120VAC-276VAC											
	Adjustable Bypass Voltage	120VAC-276VAC											
	THDi	<5% with full load											
	Input Power Factor	≥0.99(FULL RCD LOAD)											
	Input Frequency Range	45-55Hz / 54-66Hz											
<b>Output</b>	Output Voltage	Waveform	Pure sine wave										
		Nominal voltage	208VAC/220VAC/230VAC/240VAC ±1%										
		Transient recovery	100ms (IEC 62040-3 Non-linear load)										
		Voltage distortion	<2% THD, linear load / <5% THD, non-linear load										
	Output Frequency	Synchronization range	45-55Hz / 54-66Hz (Adjustable)										
		Battery mode	50/60±0.2Hz										
	Power Factor	0.9											
	Transfer Time	Line to battery mode	0ms										
		Inverter to bypass	4ms @ ECO mode										
		ECO to Inverter mode	<10ms										
	Full Load Efficiency	Line mode	> 89% with battery fully charged										
		Battery mode	> 84% @ 12VDC / battery										
ECO mode		> 95%											
Overload Capability (Line Mode)	102% ~ 130% : 12s / 130% ~ 150% : 1.5s / > 150% : 100ms												
Overload Capability (Battery Mode)	102% ~ 130% : 12s / 130% ~ 150% : 1.5s / > 150% : 100ms												
<b>Battery</b>	Battery type	12VDC / 7Ah (XL 9Ah) (Sealed maintenance free lead acid batteries)				12VDC / 9Ah (Sealed maintenance free lead acid batteries)							
	Quantity	3	**	3	**	4	**	4	**	6	**		
	DC Voltage	36VDC		36VDC		48VDC		48VDC		72VDC			
	Charging time	< 3h charge to 90% (XL-models depending on assembly)											
Charging current (max) in A	1.5	6.0	1.5	6.0	1.5	6.0	1.5	6.0	1.5	6.0			
<b>Communication</b>	Integrated	RS232, USB, Dry Contacts, EPO											
	Optional cards	Intelligent Slot for AS 400, SNMP, Opto-coupler											
<b>Indicator &amp; Alarm</b>	Display	YES / LCD											
	Accoustic	YES											
<b>Mechanical</b>	Dimensions (HxWxD in mm)	UPS	86.5 (2U) x 438 (19") x 435								86.5 (2U) x 438 (19") x 604		
		Battery pack	86.5 (2U) x 438 (19") x 430 (only XL)								86.5 (2U) x 438 (19") x 600 (only XL)		
	Weight in kg	UPS	13.2	8.4	13.2	8.4	19.7	9.3	19.7	9.3	27.8	13	
		Battery pack max.	-	20.5	-	20.5	-	20.5	-	33.3	-	33.3	
Protection	IP20												
Operating Temperature Range	0°C ~ 40°C												
Humidity	0-95% (No condensing)												
Audible Noise	App. 52dB @ 1meter												
<b>Standards</b>	Safety	EN 62040-1											
	EMC	EN 62040-2 Class C1											
	Certifications	CE											

\*\* Variable and depends on the battery layout