

MTD-RT Series

Line-Interactive Racktower UPS
1000, 1500, 2000, 3000VA



Description

The MTD RT and MTD XL RT is EFFEKTA®'s high-end line-interactive version of the MTD series. The back-up time of the XL-models can be extended by additional external battery packs in a unified design.



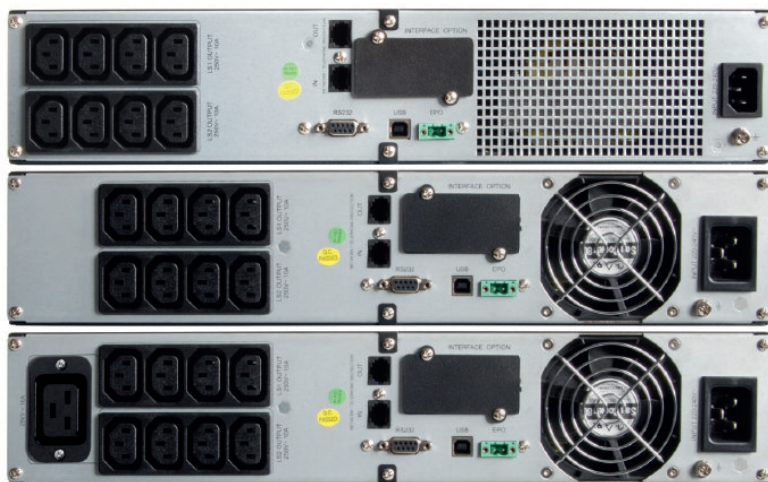
Its RackTower housing and the rotating LCD display allow both the use as a tower unit as well as installation in 19" cabinets.



Features

- UPS-classification VI-SS-311 (IEC 62040-3)
- Line-interactive-technology
- Excellent power factor of 0.9
- High efficiency (> 97%)
- XL-models expandable by external battery packs
- "RackTower" can be used both as a standalone unit, as well as a 19" rack mount unit
- Huge input voltage range
- User-friendly LCD display with backlight depending on the operating condition
- Sine wave output
- Automatic frequency detection
- Equipped with RS-232 an USB port as standard
- Slot for optional adapters: relay-card or SNMP
- Software-Suite „PowerShut“ for UPS Management in almost all current operating systems
- 24 months' warranty

Image left: On the user-friendly control panel the status of the UPS is visible at first glance from the color of the background illumination.



Top left: MTD 1000/1500 RT rear view

Middle left: MTD 2000 RT rear view

Bottom left: MTD 3000 RT rear view

The MTD RT series is equipped with RS-232, USB and emergency contacts as standard. The card slot can be equipped with additional communications cards like a SNMP adapter or a relay card.

All MTD RT models offer at least 8 IEC C13 (10A) Consumer outputs.

The 3000 VA model additionally provides a 16 ampere IEC C19 output.

Specifications

Model	MTD 1000 RT		MTD 1500 RT		MTD 2000 RT		MTD 3000 RT			
	Standard	XL	Standard	XL	Standard	XL	Standard	XL		
Power	Power in VA	1000		1500		2000		3000		
	Power in W	900		1350		1800		2700		
Autonomy time	100% load (XL models expandable)	4.5 min.	> 20 min.	3 min.	> 19 min.	4.5 min.	> 19 min.	3 min.	> 20 min.	
	50% load (XL models expandable)	10 min.	> 45 min.	7 min.	> 45 min.	10 min.	> 45 min.	7 min.	> 45 min.	
	Minimum number of external battery packs	0	1	0	2	0	1	0	2	
Input	Nominal input voltage / voltage range	230VAC / 161~276VAC								
	Input frequency range	50/60Hz normal mode / 40-70Hz generator mode								
	Boost threshold	207VAC ± 4% / 215VAC ± 4% (setup 230VAC wide range)								
	Undervoltage threshold	161VAC ± 4% / 171VAC ± 4% (setup 230VAC wide range)								
	Voltage return threshold	243VAC ± 4% / 236VAC ± 4% (setup 230VAC wide range)								
	Overvoltage threshold	276VAC ± 4% / 266VAC ± 4% (setup 230VAC wide range)								
	Output voltage	220, 230, 240VAC								
Output	Voltage tolerance (battery mode)	± 5% RMS								
	THD(i) typical	linear load	< 3% THD							
		non-linear load	< 6% THD							
	Frequency-tolerance	synchronization range.	45-55Hz / 55-65Hz							
		battery mode	50/60 ± 0.1Hz							
	Power factor	0.9								
	Wave form	sinusoidal								
Efficiency	>97% (Normal operation, charged batteries)									
DC start-up	Black start	Yes								
Switch time	Typical	2 ~ 6msec.								
Battery	Nominal voltage	36VDC		36VDC		72VDC		72VDC		
	Number of blocks x capacity / block	On request / depending on the battery assembly								
	Type	Maintenance free sealed lead-acid battery								
	Life expectancy	Approximately 5 years (subject to environment.) Optional 10 years								
	Recharging time	Approximately 3 h to 90% (with one battery pack)								
Display	LCD	UPS status, I/P&O/P Voltage & Frequency, Load, Battery Voltage, Capacity, Temperature								
	LCD-backlight	Normal (blue) / Fault (Red)								
Audible alarm	Battery mode / Battery low	Beeping every 4 seconds / Beeping every second								
	USV fault / Overload	Beep continuously / Beeping every second								
Interface		RS232, USB, EPO, Card slot for optional SNMP / relay card								
Environment.	Temperature	0°C – 40°C								
	Humidity	0-95% non-condensing								
	Operating height	0 - 1500 meter @ 0-40°C / 1501 - 3000 meter @ 0-35°C								
	Acoustic Noise	< 50 dBA @ 1 m								
Mechanic	Casing	steel-tower / front plastic								
	Protection class	IP 20								
	Dimensions (HxWxD in mm)	UPS	86.5 (2U) x 438 (19") x 430				86.5 (2U) x 438 (19") x 600			
		batterie pack	86.5 (2U) x 438 (19") x 430 (XL only)				86.5 (2U) x 438 (19") x 600 (XL only)			
	Weight	UPS	16 kg	12 kg	16 kg	12 kg	29.5 kg	18.6 kg	29.5 kg	18.6 kg
batterie pack max.		-	20.5 kg	-	20.5 kg	-	33.3 kg	-	33.3 kg	
Terminals	Input	1 x IEC (10A)				1 x IEC (16 A)				
	Output	8 x IEC C13 (10A)				8 x IEC C13 (10A)		8 x IEC C13 (10A) + 1 x IEC C19 (16A)		
Regulations / standards	Safety	EN 62040-1								
	EMC	EN 62040-2 Class C1								
	Certifications	CE								