

# Protect 1 RT

## 6 - 10 KVA w/o batt.



### Applications



### Convertible Rack/Tower



ON-LINE

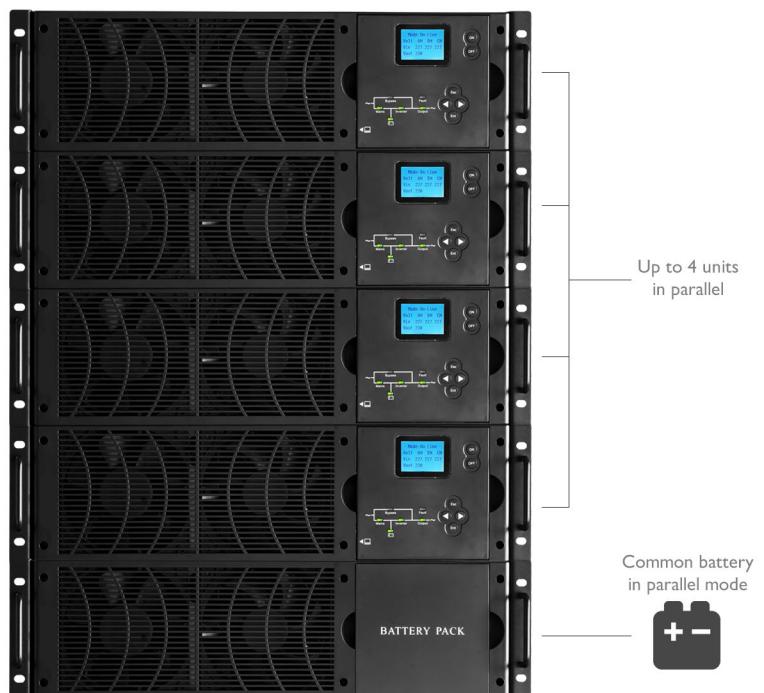
### Specifications



- On-line "double conversion" technology (VFI)
- DSP (Digital Signal Processor) technology
- Wide input voltage range (120-276V or 208-478V)
- Wide frequency range 40-70Hz +/-0.5Hz
- Input power factor up to 0.99 and high output power factor 0.9
- Parallel connection up to 4 units (N+1)
- Rack/Tower XL design with convertible display
- Input power factor correction (PFC)
- Battery (DC) cold start
- Genset compatible
- ECO-mode for energy saving
- Self testing at UPS startup
- Internal static and manual bypass
- Selectable amount of batteries : 16/18/20pcs
- Common or separate battery in parallel mode
- Backup-time indication on the display
- Adjustable charger 1-10A
- Fixing for tower and rackmount included
- EPO contact (Emergency Power Off)
- Intelligent management through RS232 slot, USB
- Including monitoring software
- Backfeed protection
- Options:**
- SNMP card, relay card
- External maintenance bypass
- Galvanic isolation transformer
- Spirit XL II version (3/1)
- 2 years warranty

### Parallel Redundancy Mode

Up to 4 Protect 1 RT II systems can be connected in parallel to get maximum power capacity. Only one battery is necessary in the parallel redundancy mode.





Protect 1 RT	Model	
	6kVA	10kVA
Power (kW)	5,4	9
<b>— Input</b>		
Connection	L-N (single phase), optional : 3L-N 4 wires (three phase)	
Nominal voltage	220/230/240Vac, optional 380/400/415Vac	
Input voltage range	120-276Vac (1/1), optional 208-478Vac (3/1)	
Frequency range	45-55Hz for 50Hz, 55-65Hz for 60Hz (auto-sensing)	
Power factor	>0.99	
Harmonic distortion (THDi)	≤ 3 % at 100% non-linear load	
Bypass voltage range	+25% (+10%, +20% - option), -45% (-20%, -30% - option), frequency range : +/-10%	
<b>— Output</b>		
Output connection	2 x IEC-C13	
Voltage	208/220/230/240VAC	
Type of wave	Pure sine wave	
Harmonic distortion (THD)	≤ 2% linear load; ≤ 5% non-linear load	
Frequency	50/60Hz +/-0,1Hz	
Voltage regulation	+/-1% at nominal load	
Crest factor	3:1	
Efficiency at 75-100% load	>92% (AC mode) / >94% (battery mode) / >97% (ECO mode)	
<b>— Battery (external)</b>		
Voltage	16/18/20pcs 12V - only external batteries (modules)	
Charging current	1-10A adjustable	
Parallel systems	Common or separate battery possible	
<b>— Protection</b>		
Input/output	Overvoltage, short-circuit, battery deep discharge, thermal protection	
Overload capability (AC mode)	Load ≤110% : 3min, ≤125% : 30sec, ≤150% : 1sec, >150 : switching to bypass	
Overload capability (battery mode)	Load ≤110% : 30sec, ≤125% : 1sec, ≤150% : 200ms, >150 : shutdown of the UPS	
Overload capability (bypass)	Input fuse 40A	Input fuse 63A
<b>— Alarms - informations</b>		
Audible	Battery backup, battery low, overload, short-circuit, fault and error code	
LED	AC, battery, bypass, working modes, overload, error	
LCD	Voltage / frequency, load %, battery voltage, temperature, remaining backup time	
Audible noise at 1m	<55dB	
<b>— Bypass</b>		
Type	Internal static bypass / external maintenance bypass (option)	
<b>— Certificates</b>		
EMC protection	CE, EN/IEC 62040-2, EN/IEC 62040-1-1	
Protection class	IP20 (up to IP55 on option)	
<b>— Interface</b>		
Standard	USB, parallel port, EPO, RS232, intelligent slot	
Options	SNMP, relay card	
<b>— Dimensions</b>		
UPS, WxDxH, mm	440x580x130mm (3U)	
Weight of the UPS	23kg	25kg
<b>— External battery modules</b>		
Battery	16/18/20 pcs per 12V/9Ah	
Dimensions WxDxH and weight	440x720x132mm (3U) / 67kg	
Connections input/output/battery modules	Terminals	

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