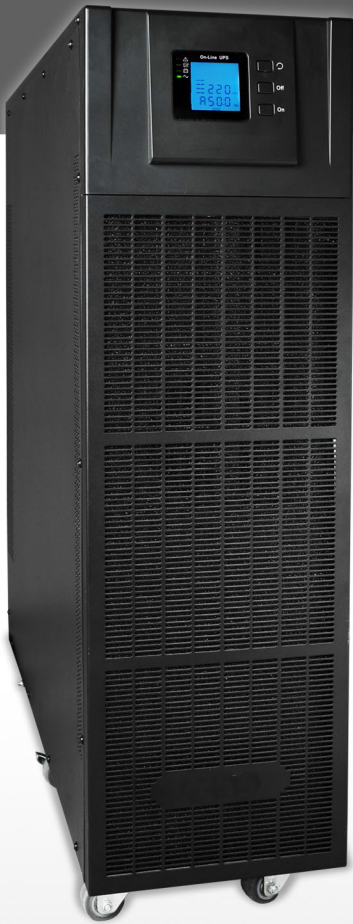
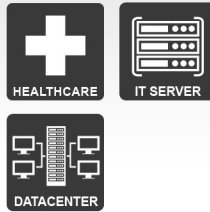


# Protect 2

## 10 - 120 kVA



### Applications



### Price-Performance Ratio

The **Protect 2** series is our best “price-performance ratio“ 3/3 phase UPS. Based on our modular UPS technology, we are able to offer extremely small UPS 10-30kVA solutions. A combination of our modular based UPS with a special DC/DC converter, the Premium VIS UPS can work with a battery voltage of only 192 to 240Vdc (adjustable). It allows to reduce space, batteries and price.

### Specifications



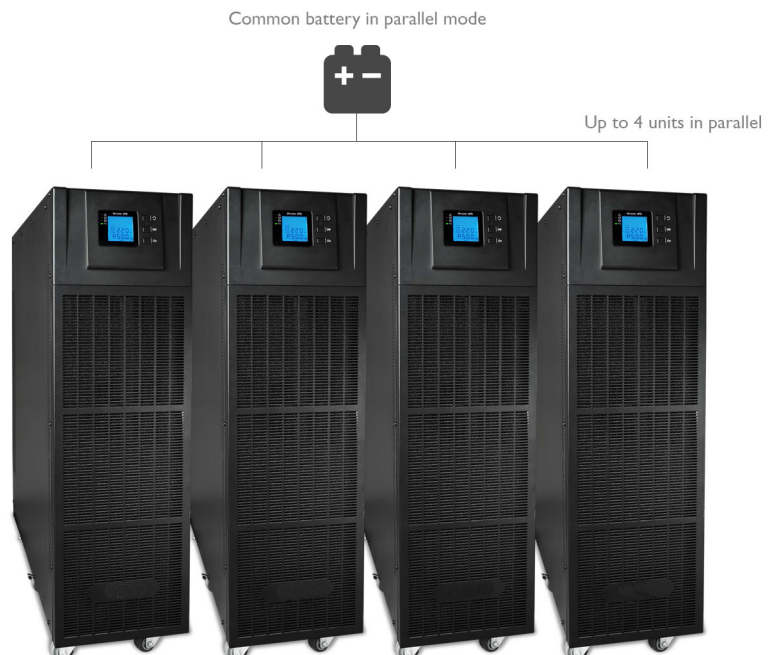
- On-line “double conversion” technology (VFI)
- Parallel redundancy On-line UPS (up to 4 units)
- Input power factor up to 0,99 (PFC technology)
- DSP (Digital Signal Processor) technology
- Common battery string for parallel units
- IGBT technology (rectifier and inverter)
- Internal static and manual bypass
- 16/18/20pcs 12V batteries per string (adjustable)
- ECO-mode for energy-saving
- Intelligent charging management
- Self-test during UPS startup
- Internal and external batteries
- Unbalanced load acceptable
- Wide input voltage range
- Battery (DC) cold start
- LCD-LED double display with audible/visible alarms
- RS485 and USB ports, dry contacts
- EPO (Emergency Power Off)
- Backfeed protection
- 2 years warranty

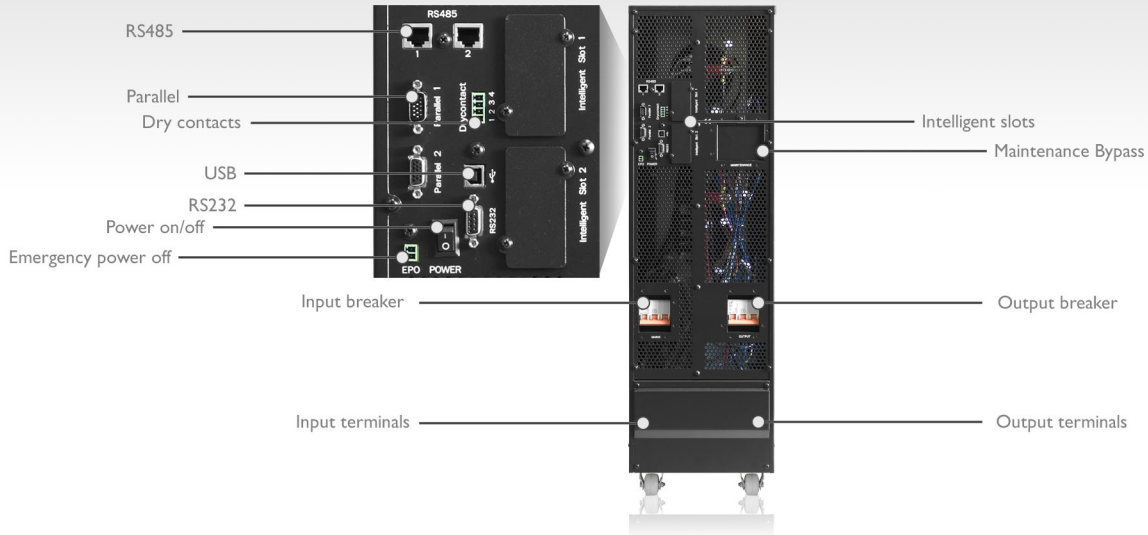
#### Options:

- SNMP card
- Relay card
- External maintenance bypass

### Parallel Redundancy Mode

Up to 4 . Protect 2 systems can be connected in parallel to get maximum power capacity. Only one battery is necessary with the parallel redundancy mode.





Protect 2	Model			
	10kVA	15kVA	20kVA	30kVA
Power (kW)	9	13,5	18	27
<b>— Input</b>				
Nominal voltage	380/400/415Vac (3ph+N+PE)			
Maximum voltage	208-478Vac			
Frequency range	45-55Hz for 50Hz, 55-65Hz for 60Hz (auto-sensing)			
Input power factor	0.99			
Harmonic distortion (THDi)	<3% (at 100% non-linear load)			
Bypass voltage range	-45%, +15%			
Bypass frequency range	+/-10%			
<b>— Output</b>				
Voltage regulation	380/400/415V +/-1% at nominal load			
Harmonic distortion (THD)	<2% linear load, <5% non-linear load			
Frequency	50/60Hz +/-0,1Hz			
Crest factor	3:1			
Efficiency at 75-100% load	93% (AC mode) / 94% (battery mode) / 97% (ECO mode)			
Bypass	Internal static (automatic) and manual bypass / External bypass optional			
Transfer time	Mains to battery : 0msec, mains to bypass : 0msec			
<b>— Battery</b>				
Voltage	Adjustable (192/216/240Vdc)			
Internal battery VRLA-AGM	20x12V 9Ah	2x20x12V 9Ah	2x20x12V 9Ah	3x20x12V 9Ah
Charging current (extendable)	1,35A	2,7A	2,7A	10A
<b>— Protection</b>				
Input / output	Overvoltage, short-circuit, battery deep discharge, thermal protection			
Overload	≤110% : 60min, ≤125% : 10min, ≤150% : 1min, >150 : switch to bypass mode			
<b>— Alarms - information</b>				
Audible alarm	Line failure, battery low, bypass-overload status, fault status			
LED	Line-/backup-/ECO-/bypass-mode, battery low/bad/disconnected, overload, fault			
LCD	Voltage/frequency, load %, battery voltage/runtime			
<b>— Standard</b>				
Safety	IEC/EN62040-1, IEC/EN60950-1			
EMC	IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-8			
Protection class	IP20			
<b>— Environment</b>				
Temperature / humidity	0-40°C / 0-95% (non-condensing)			
Audible noise at 1m	< 55dB			< 58dB
<b>— Interface</b>				
Standard	USB, dry contacts, intelligent slot, parallel port RS485, RS232, EPO			
Optional	SNMP card, relay card			
<b>— Dimensions</b>				
Weight (without batteries)	42kg	45kg	67kg	
WxDxH, mm	250x828x868			

ON-LINE