

UPS Tower

MINERVA 31 10 / 15 / 20 kVA

The MINERVA 31 is currently the most compact double conversion UPS system with 3-phase input and 1-phase output for use in the smallest space. It can be extended extremely flexibly in terms of autonomy time by means of external battery packs. In addition, the input can also be configured as 1-phase in addition to 3-phase.

The current consumption is almost ideally sinusoidal. Furthermore, the MINERVA 31 offers an output power factor of 1.0.

With an efficiency of up to 94.5% in normal operation, it is one of the most effective and economical UPS systems on the market and thus ideally suited for saving money.



■ Rear view



MINERVA 31 Rear view

Options for extended communication and highest availability:

- SNMP/web or relay card for monitoring in network environments
- Additional battery modules to increase the bridging time to several hours
- External manual bypass for scheduled UPS maintenance or UPS replacement without shutdown
- Special designs available for industrial applications (connections / special enclosures, etc.)

■ Characteristics

- UPS classification VFI-SS-111 according to IEC 62040-3
- Online double converter with sine wave output switchable to high efficiency mode
- Battery remaining time display on LCD
- Extraordinarily compact design
- Service-friendly battery replacement
- UPS software for all common OS
- Incl. RS232/USB and expansion slot
- Integrated emergency stop contact (REPO)
- 24 months warranty

■ Special features

- Unbeatable price advantage in this power class
- Outstanding power factor of 1.0
- Outstanding efficiency of up to 94.5% in normal operation
- Line feedback THDi <2.5%
- Automatic battery test adjustable via display
- Low-noise due to intelligent fan control
- Dry-In/Dry-Out interface as standard
- Parallel redundant operation possible
- Multilingual 7" LC colour touch display

■ Specifications

Model MINERVA 31		10 kVA	15 kVA	20 kVA
Input (AC)	Nominal power in VA/W	10000/10000	15000/15000	20000/20000
	Autonomy time @ 100 / 50% Load	As standard in min. 2 / 10	6 / 16	2 / 10
	higher autonomy times on request	On request		
Technology	Online double conversion	VFI-SS-111 according to IEC 62040-3		
Phase	Input	380/400/415 VAC, (3Ph+N+PE) or 220/230/240 VAC, (L+N+PE)		
	Output	220/230/240 VAC, (L+N+PE)		
Input	Nominal voltage configurable	380/400/415VAC or 220/230/240VAC		
	Input voltage range	208~478VAC or 120~276VAC		
	Input frequency range	40-70Hz (autodetect)		
Output	Output voltage	220/230/240 VAC		
	Voltage regulation	±1%		
	Frequency range	50 Hz / 60 Hz ± 1 Hz		
	Transfer time	none		
	Overload Capability (Line Mode)	< 125% for 10 min., < 150% for 30 Sek.		
Efficiency	Normal-Mode	Max. 94.5%		
	ECO- Mode	Max. 98%		
Battery	Type	maintenance-free sealed lead fleece batteries		
	Expected service life	5 years / optional 10 years		
	Nominal DC-voltage	192-240VDC configurable		
	Max. charging current standard	max. 20 A		
Communication	Time to recharge	from 2 h. to 90%, depending on the battery capacity		
	Interfaces	RS232, USB, Relay, EPO, Parallelport		
	Slots for communication cards	Optional Relay card or SNMP- card		
Dimensions / Weight	Display	multilingual LC-display and LED		
	Dimensions UPS (HxWxD in mm)	868 x 250 x 900		
	Dimensions battery cabinet (HxWxD in mm) optional	868 x 250 x 828		
	UPS weight in kg (with standard battery configuration)	118 1x20 pcs.	173 2x20 pcs.	174 2x20 pcs.
	Weight of battery cabinet in kg	depending on the battery configuration		
Terminals	Protection	IP20		
	Input	hardwired		
Environmental conditions	Output	hardwired		
	Temperature	0°C – 40°C, 20°C recommended		
	Humidity	0-90 % RH @ 0- 40°C (not condensing)		
Safety / Standards	Safety	EN 62040-1		
	EMC	EN 62040-2 Class C3		
	Standards	CE		