

Multilingual Hi-Tec UPS

MINERVA 60-150 kVA

The MINERVA is currently the most compact online double conversion UPS system with 3-phase input and output and can be used in the smallest space. It can be extended by external battery packs to extremely high autonomy times.

Thanks to its high-quality multilingual 7"-touchscreen, it can be used without any problems internationally. The language can be set to English, German, Spanish, French, Russian, Portuguese, Italian, Polish or Czech.

The output voltage is perfectly sinusoidal. Furthermore, the MINERVA offers an output power factor of 1.0.

With an efficiency of up to 95.5%, it is extremely effective and economical, making it ideal for saving cash.

Up to 6 devices can be connected in parallel to further increase the reliability of the consumers through redundancy.



■ Rear view



MINERVA 60-150kVA rear view

Options for advanced communication and highest availability:

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

Properties

- UPS classification VFI-SS-111 according to IEC 62040-3
- VFI sine wave output can be switched to ECO mode
- Battery remaining time display on LCD display
- Extremely compact design
- UPS software for all common OS
- Incl. RS232 / USB and expansion slots
- Integrated Emergency Power Off (EPO)

Special Features

- Excellent power factor of 1.0
- Dual input
- Parallel redundant operation possible
- 9-language 7" touch screen TFT display
- Automatic battery test adjustable via the touchscreen
- Black box function and event log export from 1000 to 10000 events that can be stored (depending on the size of the individual events)

Specifications

Model		Minerva 60kVA	Minerva 100kVA	Minerva 120kVA	Minerva 150kVA
Power	Nominal power in kVA/kW	60 / 60	100 / 100	120 / 120	150 / 150
Autonomy time	Batteries only in external battery cabinets	depending on quantity and capacity of batteries			
Technology	Online double conversion	VFI-SS-111 according to IEC 62040-3			
Phases	Input / Output	3-phase / 3-phase			
Input	Nominal voltage	380/400/415VAC			
	Operating voltage range	138~485VAC			
	Total Harmonic Distortion (THDi)	≤ 3 % (100% non-linear load)			
	Operating frequency	40Hz-70Hz			
Output	Output voltage	380/400/415VAC			
	Voltage tolerance	±1%			
	Power factor	1.0			
	Frequency range	1.Line Mode: synchronize with input; when input frequency > ±10% (±1%/±2%/±4%/±5% optional) 2.Battery Mode:50/60*(1±0.02%)Hz			
	Switchover time	0ms			
	Overload capability	Load≤110%: last 60min, ≤125%: last 10min, ≤150%: last 1min			
	Voltage waveform	sinusoidal			
	Efficiency	Normal-Mode / ECO-Mode	95.5%		
Battery	Type	maintenance-free sealed lead fleece batteries			
	Expected life time	5 years/10 years			
	Battery voltage	Optional Voltage: ±180V/±192V/±204V/±216V/±228V/±240/±252/±264/±276/±288/±300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs optional) 360Vdc~600Vdc (30~50 pcs, 36 pcs define, 36 and 50 pcs no power derating; 32~34 pcs output power factor 0.9;30 pcs output power factor 0.8;)			
	Charge Current(A) (charge current can be set according to battery capacity installed)	Max. current 20A	Max. current 40A		Max. current 60A
	Recharging time	< 8h, depending on the battery capacity			
	Communication	Communication	USB, RS232, RS485, Parallel port, REPO port, LBS port, Backfeed port, Intelligent slot, SNMP card (optional), Relay card (optional)		
Display		9-language 7" touch screen TFT display and LEDs			
Parallel mode		max. 6 units for redundancy or increasing output power			
Dimensions / weight	Dimension D×W×H (mm)	828x250x868	850x442x1200		
	Net weight (kg)	83	157	162	190
	Dimension standard battery cabinet	780x600x1200 (D×W×H in mm)			
	Weight of battery cabinet in kg	depending on the quantity and capacity of batteries			
	Protection	IP 20 (optionally higher protection class possible)			
Connections	Input	hardwired			
	Output	hardwired			
Environmental conditions	Temperature	0°C – 40°C, 20°C recommended			
	Humidity	0-90 % RH @ 0- 40°C (not condensing)			
	Operation noise	<58dB	<63dB	<65dB	<66dB
Standards	Safety	IEC/EN62040-1, IEC/EN60950-1			
	EMC	IEC/EN62040-3, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8			
	Approvals	C			