

UPS Modular Tower

THOR 31 6-30 kVA

For the highest demands on flexibility and reliability, EFFEKTA® recommends the new THOR 31 UPS system with 3-phase input and 1-phase output.

The outstanding efficiency of up to 99% in ECO mode makes this system one of the most efficient UPS systems on the market.

The modular design with 6 kVA / kW modules allows to set up a high availability UPS system up to 30 kW with a total of 5 modules. With their help, an n+x redundancy can be set up. Furthermore, up to 4 systems can be connected in parallel.



Detail views



Thor 31 Module



Thor 31 Steuereinheit

Options for advanced communication and highest availability:

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

■ Characteristics

- UPS classification VFI-SS-111 according to IEC 62040-3
- Online double conversion UPS with sine wave output switchable to high efficiency mode
- Battery remaining time on LCD display
- Extraordinarily compact design
- Service-friendly battery replacement
- UPS software for all common OS
- Incl. 2 expansion slots
- Integrated remote 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
- Mains 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"-large LC-color touch display

■ Specifications

Model THOR Modular 31		6 – 30 kVA
Power	Nominal power in VA/W	6000 - 30000
	Power per module	6 kVA / 6 kW
Bridging time	UPS system THOR Modular 31	Configurable according to number of modules and battery capacity
Technology	Online continuous converter	n+x technology scalable / VFI-SS-111 according to IEC 62040-3
Phases	Input/Output	1-phase/1-phase or 3-phase/1-phase
Input	Nominal voltage configurable	380/400/415 VAC or 220/230/240 VAC
	Input voltage range	208~478 VAC or 120~276 VAC
	Input frequency range	40-70 Hz (automatic detection)
	Mains feedback THDi	≤3% (100% non-linear load).
Output	Output voltage	220/230/240 VAC
	Power factor	1.0
	Voltage regulation	±1%
	Frequency range	Mains operation: ±1%, ±2%, ±4%, ±5%, ±10% of rated frequency (optional). Battery operation: 50 Hz / 60 Hz ± 0.2 Hz
	Changeover time	0 ms
	Overload normal operation	≤110%: for 60 min, ≤125%: for 10 min, ≤150%: for 1 min, ≥150% immediate switchover to bypass.
	Overload battery operation	≤110%: for 10 min, ≤125%: for 1 min, ≤150%: for 1 sec, ≥150% immediate switch-off of the UPS.
	Voltage mode	Sine
	Crest factor	3:1
	THD	≤2% with linear load ≤5% with non-linear load
Efficiency	Normal operation	max. 94%
	ECO operation	max. 98%
Battery	Type	Maintenance-free lead-fleece accumulators
	Service life expectancy	5 years (optional 10 years)
	DC rated voltage	192-240 VDC adjustable, standard 240VDC
	Maximum charging current	max. 12A per power module / max. 60 A UPS system
Communication	Interfaces	RS232, 2xRS485, switching contacts, REPO
	Expansion slot	2 x for relay or SNMP card
	Display	LCD display and LED indicators
Dimensions / Weight	UPS dimensions (HxWxD in mm)	1400 x 600 x 840
	Weight UPS without modules in kg	150
	Weight UPS power module in kg	25
	Dimensions battery cabinet (HxWxD in mm)	1200 x 600 x 780
	Weight battery cabinet in kg	depending on battery configuration
	Protection class	IP20
Connections	Input	Fixed connection on terminals
	Output	Fixed connection on terminals
Environmental conditions	Temperature	0°C - 40°C, 20°C recommended
	Humidity	0-95% RH (non-condensing)
Protection / Standards	Safety	EN 62040-1
	EMC	EN 62040-2 class C3
	Approvals	CE