

GUTOR MODULAR AC UPS SYSTEM

Compact, flexible, redundant, and scalable industrial grade AC power protection.

Gutor Modular UPS systems are designed, tested, and built to last - even in harsh environments - with highly flexible configurations.

Designed for harsh environments

- Protects against electrical outage with surge protection and galvanic isolation
- The short circuit capability allows it to be installed near substation equipments
- Industrial enclosure with unique framework increases robustness and protection
- IP20 as a standard, up to IP42 on request
- Has a 20+ years design lifespan

Enhanced system availability

- N+1 or N+x design increases the internal redundancy of the system
- All Gutor Modular power modules have a "live swap" concept that allows the power modules to be maintained and repaired without interrupting the load



Bottom entry

Top and bottom entry

Flexible and scalable design

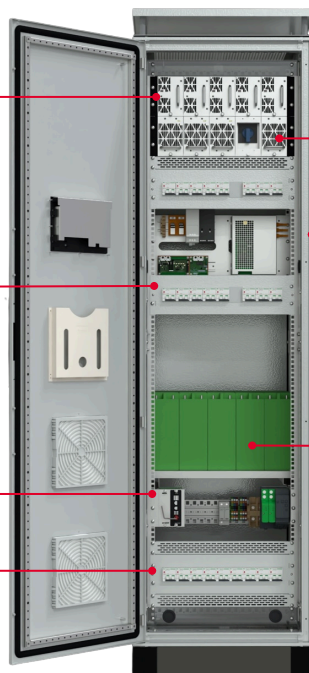
Independent modular chargers with internal redundancy and power factor correction

Breakers for input, output, battery, bypass & manual bypass (up to 65kA)

Advanced asset management

- Ready to connect to most communication protocols
- Cybersecure certified

Integrated output feeders



Modular inverters associated with **static and manual bypass switch**

Cable entry

- Bottom cable entry allows for a smaller footprint
- Top and bottom with a wider enclosure

Battery

- Ready for lead acid (VRLA and VLA), NiCd, Li-Ion, and SMC
- VRLA and SMC batteries can be integrated into one cabinet to achieve footprint optimization

Technical Data

Model	GUMUPS		
Rectifier Input			
Input voltage tolerance (V_{AC})	220/230/240V (1ph) and 380/400/415V (3ph) - other voltages on request		
Frequency	50Hz \pm 10% (other frequency upon request)		
THDi harmonics	\leq 5%		
Power factor	Up to 0.99		
Withstand short circuit (kA)	15kA up to 50kA with input MCCB in option		
Voltage Range (V_{DC})	Depending on battery configuration		
Efficiency	Up to 95%		
Inverter			
Input voltage (V_{DC})	24, 48, 60, 125 or 220V		
Output voltage tolerance (V_{AC})	220/230/240V (1ph)		
Output power	1-10 kVA (configuration-specific) / other ratings on request		
Frequency	50Hz \pm 5%/ free running \pm 0.1% (other frequency upon request)		
Static voltage tolerance	\pm 1%		
Dynamic voltage tolerance	\pm 10% at fullload		
THDu harmonics	Typical \leq 3% linear loads		
Overload	Module-specific, most configurations have 125% / 30sec - 140% / 4sec - 250% / 0.5sec		
Efficiency	Up to 91.6%		
Bypass input			
Input voltage (V_{AC})	220/230/240V (1ph) and 380/400/415V (3ph) - other voltages on request		
Current	100A		
Frequency	50Hz \pm 5% (other frequency upon request)		
Power Factor	0.8 lag to 0.8 lead		
Switching time	2 ms typical		
Overload	Module-specific, most configurations have 125% / 30sec - 140% / 4sec - 250% / 0.5sec		
Built-in backfeed protection	Yes		
General arrangement			
Configuration	N+0, N+1, N+x, N+N between racks (dual input feeder capable)		
Input neutral earthing type	TN or IT or HRG		
Display	Front 10" touch display with up to 39 LEDs for warnings or alarms		
Communication	Minimum 2 output dry contacts Modbus TCP / Modbus RS485 / SNMP / IEC 61850 as an option - others upon request		
Emergency power off (EPO)	EPO input terminal with an internal 24V DC power supply		
Serviceability	MTBF > 270 000h Very low MTTR with live swap concept to replace any power module without switching off the system		
Battery protection	Breakers are included		
Output earthing system	Galvanic isolation through double conversion line. Earthing sys follows input of static & manual bypass		
Battery	Built-in VRLA or SMC battery, or separate battery such as VLA, NiCd and Li-Ion		
Output distribution breakers	Up to 9 output breakers with signal contact		
General data			
Cable entry	Bottom entry or top entry		
Cabinet dimensions (H x W x D)		Bottom Entry	Top Entry
	IP20 - IP40: IP42:	600 x 600 x 2100 mm 600 x 600 x 2200 mm	800 x 600 x 2100 mm 800 x 600 x 2200 mm
Ambient temperature range for operation	-10°C to 40°C - design for higher ambient conditions upon request		
Noise level	55dBA - 68dBA		
Air flow	From front to top		
Allowable air humidity	Up to 95% non-condensing		
Altitude above sea level	Nominal up to 2,000m, with derating up to 3,000m - others on request		
Paint	RAL 7035		
Standards	IEC 62040-1, IEC 62040-2, IEC 62040-3, IEC 61000, IEC 62443, CE mark		
Options			
Built-in configuration	Additional dry contacts, analog meters, input voltage adaptation, voltage dropper, DC/DC converter, inverter, multiple battery string protection, and more on request		

Contact your local sales representatives for a secure power solution customized for your site requirement.