



Industrial Modular UPS System

HM / HMM / HML Series - Technical Datasheet

Scalable 15 kVA - 720 kVA modular UPS with online double conversion, N+X redundancy, unity power factor and full IoT monitoring.

Source: XGW Back-up UPS Catalog 2026

1. Model Families

Three voltage families cover global 400 V, North-American 480 V and 208 V low-voltage grids, all sharing hot-swappable N+X power modules.

Family	Voltage (L-L)	Power range	Typical application
HM Series	380/400/415 V	15 - 600 kVA	General data centre & industrial on global 400 V grids
HM (large frame)	380/400/415 V	50-600 / 62.5-500 kVA	Mega data centres, up to 1.8-2.0 MVA in parallel
HMH Series	480 V	60 - 720 kVA	North-American 480 V installations
HML Series	200/208/220 V	12 - 360 kVA	208 V systems, edge IT, medical, light industrial

2. Electrical - Input

Parameter	Specification
Connection	3P5W (3P+N+PE)
Rated voltage	HM 380/400/415 V - HMM 480 V - HML 200/208/220 V (L-L); 220/230/240 V (L-N) for HM
Rated frequency	50 / 60 Hz
Input power factor	> 0.99
Current distortion (THDi)	< 3% at 100% linear load
Input voltage range	HM 304-478 V full load (228 V derate 100%→75%); HMM 384-528 V full load (288-384 V derate); HML 166-261 V full load (125-166 V derate)
Frequency range	40 - 70 Hz

3. Electrical - Output

Parameter	Specification
Topology	Online double conversion, 3P/3P (selected frames 3P/1P, 1P/1P)
Rated voltage	HM 380/400/415 V - HMM 480 V - HML 200/208/220 V (L-L)
Rated frequency	50 / 60 Hz
Output power factor	1.0 (unity)
Voltage accuracy	+/- 1.0%
Load regulation	< 5% (20% -> 80% -> 20% step load)
Recovery time	< 20 ms (0% -> 100% -> 0% step load)
Output THDu	< 1% linear - < 5% non-linear (IEC 62040-3)
Crest factor	3 : 1
Phase accuracy	120 deg +/- 0.5 deg
Overload - inverter	110% 1 h - 125% 10 min - 150% 1 min - >150% 200 ms
Overload - bypass	110% continuous - 110-125% 5 min - 125-150% 1 min - >150% 1 s

4. Battery, Synchronisation & Control

Parameter	Specification
Battery voltage	HM / HMM +/-240 VDC - HML +/-120 VDC
Charging capacity	20% x Pout
Charging accuracy	+/- 1%
Sync window	+/-0.5 to +/-5 Hz (default +/-3 Hz)
Slew rate	0.5 - 3 Hz/s (default 0.5 Hz/s)
Transfer / response	0 ms (online double conversion, no break)
Display	LED + 7" / 10" touch LCD with IoT; self-diagnosis, fault record, history storage
Communication (std)	USB, RS232, RS485, dry contact, cold start, air filter
Options	SNMP card, AS400 card, parallel kit, SPD, LBS (load bus sync)
Protection class	IP20
Power module (WxDxH)	442x659x174 mm (large) - 440x678x85 mm 2U (30 kW) - 440x555x85 mm 2U (20 kW)
Cabinet (WxDxH)	600x1000x1600 / 600x1000x2000 / 1200x1100x2000 mm (HM/HMM) - 482x700/816 mm rack (HML)

5. Environment & Certification

Parameter	Specification
Operating temperature	0 - 40 deg C
Storage temperature	-25 - 70 deg C
Humidity	0 - 95% RH, non-condensing
Noise (1 m)	65 dB @ 100% load (small) - 72 dB @ 100% load (large); 62 / 69 dB @ 45% load
Safety	IEC 62040-1, IEC 60950-1
EMC / EMS	IEC 62040-2, IEC 61000-4-2 (ESD), -4-3 (RS), -4-4 (EFT), -4-5 (Surge)
Efficiency	HM / HMM up to 96% - HML >=93% (normal & battery mode)

Applications: Government, finance, IT, education, transportation, broadcasting, medical, energy, data centres and industrial process control.

6. Key Features & Contact

Fully digital control, flexible and robust. IoT-enabled 7"/10" touch LCD with intelligent self-diagnosis, rich fault recording and large-capacity history storage. Maximum system capacity up to 1.8-2.0 MVA for mega data centres.

Mounting: 19" rack or standalone (compact frames). 30 kW in 2U high power density. Optional 30 A charger module for long backup applications.

Contact

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Note: Product parameters continue to be optimised; this datasheet is for reference and does not constitute an offer or commitment.