

Garun 20KL

PN: UP33TOP120KGAAZ02B

EAN: 6422956011888

Specifications

| | |
|---|---|
| Capacity | 20k VA / 20k W |
| Type | On-line |
| Phase (IN : OUT) | 3:3 / 3:1 / 1:1 |
| Input | |
| Nominal Voltage | |
| 3:3 or 3:1 | 3 x 400 VAC (3Ph+N) |
| 1:1 | 1 x 230 VAC (Ph+N) |
| Voltage range | |
| 3:3 | 190-520 VAC (3-phase) @ 50% load 305-478 VAC (3-phase) @ 100% load |
| 3:1 or 1:1 | 110-300 VAC (1-phase) @ 50% load 176-276 VAC (1-phase) @ 100% load |
| Frequency Range | 46 ~ 54Hz |
| Power Factor | ≥ 0.99 at 100% load |
| Outlet type | Terminal Block Wiring |
| Output | |
| Nominal Voltage | |
| 3 x 360*/380/400/415 VAC (3Ph+N) 1 x 208*/220/230/240 VAC (Ph-N) | |
| AC Voltage Regulation (Batt. Mode) | ± 1% |
| Frequency Range (Synchronized Range) | 46 ~ 54Hz |
| Frequency Range (Batt. Mode) | 50Hz ± 0.1 Hz |
| Current Crest Ratio | 3:1 (max.) |
| Harmonic Distortion | ≤ 2 % THD (Linear Load) ≤ 5 % THD (Non-linear Load) |
| Waveform (Batt. Mode) | Pure Sine-wave |
| Outlet type | Terminal Block Wiring |
| Transfer Time | |
| AC Mode to Batt. Mode | Zero |
| Inverter to Bypass | Zero |

*When output voltage is set as 3 x 360VAC or 1 x 208 VAC, the output power of the unit will be derated to 90%.

**Isolation transformer will occupy the internal batteries' space.



3:3 / 3:1 / 1:1
phase



True double
conversion



Parallel operation
up to 3 units

- On-line with double conversion
- Smart battery charger to optimize batteries' performance
- Adjustable batteries design
- Output power factor 1.0
- Optional isolation transformer**
- DSP technology guarantees high performance
- Active power factor correction in all phases
- High Efficiency on AC mode up to 95.5%
- EPO function
- Maintenance bypass
- 5" large touch LCD display
- Power management over SNMP / Modbus / AS 400 card
- ECO mode operation for energy saving
- Dual Input for generators compatibility

Overload

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|---------|--|
| AC Mode | 100-110% for 60 min 110-125% for 10 min 125%~150% for 1 min >150% immediately |
|---------|--|

| | |
|--------------|--|
| Battery Mode | 100-110% for 60 min 110-125% for 10 min 125%~150% for 1 min >150% immediately |
|--------------|--|

Efficiency

| | |
|---------|---------------------------------------|
| AC Mode | ≥ 95.5 % with fully charged batteries |
|---------|---------------------------------------|

| | |
|--------------|---------------------------------------|
| Battery Mode | ≥ 94.5 % with fully charged batteries |
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| | |
|----------|---------------------------------------|
| ECO Mode | ≥ 98.5 % with fully charged batteries |
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Battery

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|-------------------------------|---|
| Internal batteries (optional) | 32~40 pieces of 12V lead acid 7Ah or 9Ah |
|-------------------------------|---|

| | |
|--------------------|---|
| External batteries | 12V lead acid, (N + N) pcs x 1 string; N=16~20 |
|--------------------|---|

| | |
|------------------|-----------------------|
| Charging Voltage | +/- 13.65V*N; N=16~20 |
|------------------|-----------------------|

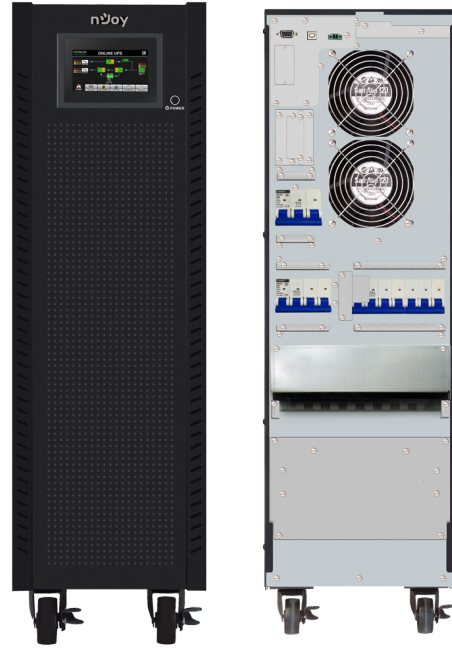
| | |
|------------------------|---------------------|
| Charging Current (max) | 1A-12A (adjustable) |
|------------------------|---------------------|

Environment

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| Humidity | < 95 % RH at 0-40°C (non-condensing) |
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|-------------|-----------------------|
| Noise level | Less than 65dB at 1 m |
|-------------|-----------------------|

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|------------------|---|
| Heat dissipation | up to 3381 BTU/h (line mode) up to 4115 BTU/h (battery mode) |
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Management

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|---------------------|--|
| Communication ports | RS232 / USB / EPO / Intelligent Port for installation of SNMP or Modbus (Protocol 38) Card |
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|------------------------|--|
| Software compatibility | ViewPower Network Edition and VMWare Shutdown Wizard |
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Physical

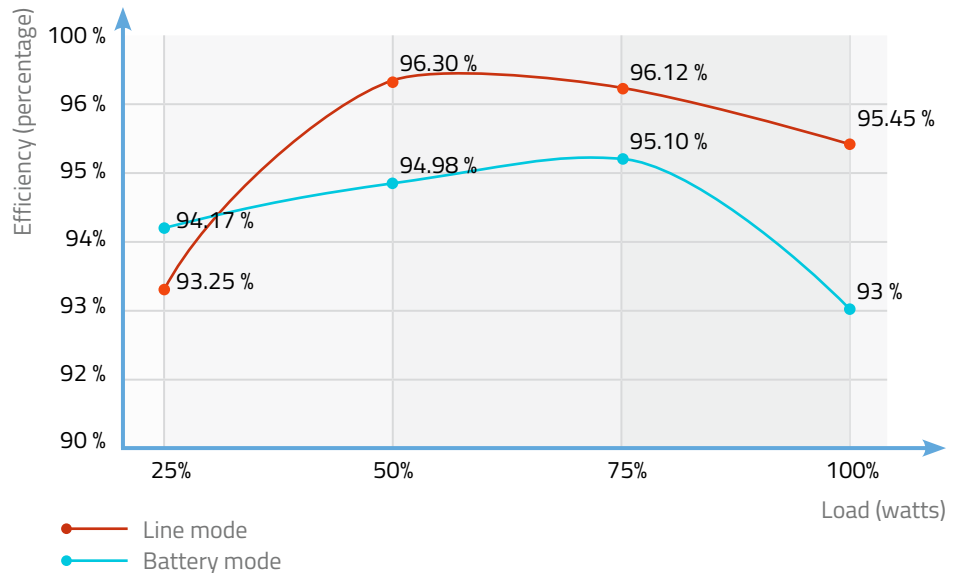
| | |
|--------------------|--------------------|
| Product dimensions | 626 x 250 x 826 mm |
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|--------------------|---------|
| Product Net Weight | 49.8 kg |
|--------------------|---------|

Efficiency

| Line mode | |
|-----------|------------|
| Load | Efficiency |
| 100 % | 95.45 % |
| 75 % | 96.12 % |
| 50 % | 96.30 % |
| 25 % | 93.25 % |

| Battery mode | |
|--------------|------------|
| Load | Efficiency |
| 100 % | 93.00 % |
| 75 % | 95.10 % |
| 50 % | 94.98 % |
| 25 % | 94.17 % |



Logistics

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|--------------------------|-------------------------------|
| Carton Box Size (LxWxH) | 775 x 370 x 900 mm |
| Pieces in the Carton Box | 1 |
| Net & Gross weight / CTN | N.W.: 49.8 kg / G.W.: 72.5 kg |

Certificates

