

iDC SPower MKII 20-40kW (Internal Battery Model)

A cost effective and yet practical double conversion online UPS



iDC SPower MKII is a cost effective and yet practical three-phase double conversion online UPS with compact footprint, ranging from 20-40kW, offering high efficiency, reliability, and flexibility.



Cost Effective

The compact footprint feature not only saves space but also reduces your operating costs



Efficiency

High efficiency to maintain the sustainability and reduce running costs



Green

A total environmentally friendly design with green element and longer battery lifetime



Reliability

High level of reliability and protection to minimize costly downtime and reduce repair time



iDC SPower MKII 20/30/40kW
(Internal Battery Model)



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Key Features

- Double Conversion online technology
- Power capacity: 20-40kW
- Output power factor 1
- Three-step IGBT PWM control technology, online mode efficiency up to 96%, ECO mode efficiency up to 99%
- Higher density reduces up to 50% of the footprint
- Powerful charger declines the charging time dramatically
- Predictable component lifetime enhances system reliability
- Optimized battery management (OBM) technology, extended batteries life by 50%
- A 5-inch color touch LCD with 10 languages provides a user-friendly interface for operation
- Robust design with default dust-proof filter & PCBA coating
- Easy slide & maintenance battery module

Reduce Footprint by 50%



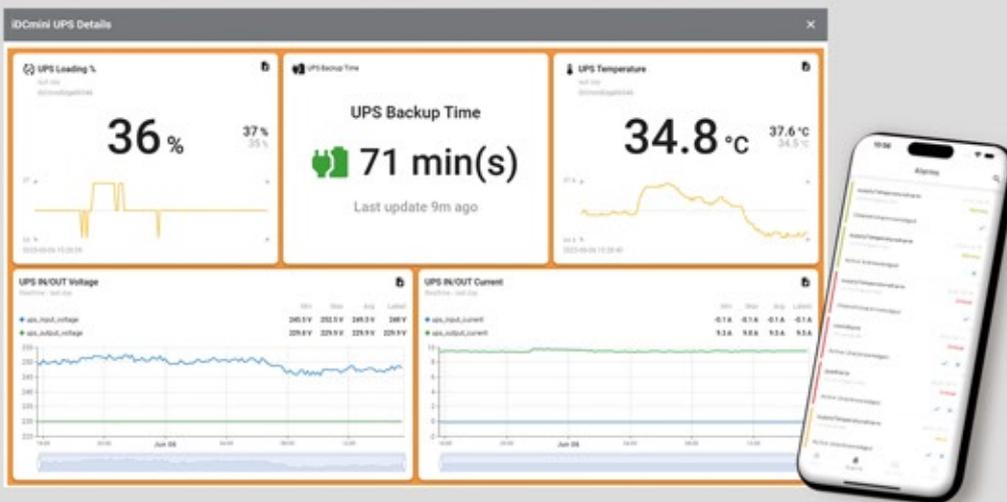
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Backup Time

| Power Rating | Half Load | Full Load |
|--------------|-----------|-----------|
| 20kW | 60 mins | 25 mins |
| 30kW | 35 mins | 15 mins |
| 40kW | 25 mins | 10 mins |

iDCmini ALLE

One Pane – Pocket NOC, your next-gen DCIM solution platform



- Simplifies UPS management and boosts operational visibility within seconds
- Accessible anywhere with you
- Instant alerts & notifications (email, SMS, Microsoft Teams)
- Data-driven insights to optimize power use and reduce energy waste



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Technical Specification

| Model | SPMKII-OT-20K | SPMKII-OT-30K | SPMKII-OT-40K |
|-------------------------------------|---|---|---|
| Capacity | | | |
| Power rating kVA | 20 | 30 | 40 |
| Power rating kW | 20 | 30 | 40 |
| Input | | | |
| Topology | PWM, IGBT based | PWM, IGBT based | PWM, IGBT based |
| Rated voltage | 230/400Vac nominal (220/380, 240/415 Selectable) | 230/400Vac nominal (220/380, 240/415 Selectable) | 230/400Vac nominal (220/380, 240/415 Selectable) |
| Voltage range | -50% ~ +20%, depends on load percentage | -50% ~ +20%, depends on load percentage | -50% ~ +20%, depends on load percentage |
| Input power factor | 0.99 | 0.99 | 0.99 |
| THD(i) | <3% | <3% | <3% |
| Rated frequency | 50/60Hz auto sensing | 50/60Hz auto sensing | 50/60Hz auto sensing |
| Frequency range | 42-72Hz | 42-72Hz | 42-72Hz |
| Output | | | |
| Power factor | 1.0 | 1.0 | 1.0 |
| Efficiency | Up to 96% in online mode; >99% in ECO mode | Up to 96% in online mode; >99% in ECO mode | Up to 96% in online mode; >99% in ECO mode |
| Output voltage | 230/400Vac nominal (220/380, 240/415 Selectable) | 230/400Vac nominal (220/380, 240/415 Selectable) | 230/400Vac nominal (220/380, 240/415 Selectable) |
| Output frequency | 50/60Hz | 50/60Hz | 50/60Hz |
| Overload capacity | Depends on battery configuration | Depends on battery configuration | Depends on battery configuration |
| THDV | <2% for Linear load | <2% for Linear load | <2% for Linear load |
| Unbalanced load | 100% | 100% | 100% |
| Crest factor | 3:1 | 3:1 | 3:1 |
| Bypass | | | |
| Internal static switch | Standard | Standard | Standard |
| Bypass voltage | 400Vac (+/- 15%) | 400Vac (+/- 15%) | 400Vac (+/- 15%) |
| Maintenance bypass switch | Standard | Standard | Standard |
| Battery | | | |
| Battery type | VRLA | VRLA | VRLA |
| Battery | 4*40 9Ah max | 4*40 9Ah max | 4*40 9Ah max |
| Charger current | 20A max | 30A max | 40A max |
| Battery voltage | 480VDC | 480VDC | 480VDC |
| Recharge time | 8 hours to 90% | 8 hours to 90% | 8 hours to 90% |
| Backup time (full/half load) | | | |
| 4 strings internal battery | 25/60 mins | 15/35 mins | 10/25mins |
| Communications | | | |
| Interface | 2x Mini-Slot, 1x Emergency Power Off input (NC or NO), 3x Building Alarm inputs, 1x RS232 | 2x Mini-Slot, 1x Emergency Power Off input (NC or NO), 3x Building Alarm inputs, 1x RS232 | 2x Mini-Slot, 1x Emergency Power Off input (NC or NO), 3x Building Alarm inputs, 1x RS232 |
| Com cards (optional) | NMC & CMC cards, relay card, EMP | NMC & CMC cards, relay card, EMP | NMC & CMC cards, relay card, EMP |
| DCIM connection | Ready | Ready | Ready |
| Environment | | | |
| Running temperature | UPS: 0-40°C; Battery: 25°C | UPS: 0-40°C; Battery: 25°C | UPS: 0-40°C; Battery: 25°C |
| Storage | +15~25°C with battery | +15~25°C with battery | +15~25°C with battery |
| Humidity | 5%~95% | 5%~95% | 5%~95% |
| Elevation | No derating < 2000m | No derating < 2000m | No derating < 2000m |
| Noise level | <=65dBA at 1m @ 75% Load (ISO7779) | <=65dBA at 1m @ 75% Load (ISO7779) | <=65dBA at 1m @ 75% Load (ISO7779) |
| Dimension | | | |
| W*D*H (mm) | 500*859*1500 | 500*859*1500 | 500*859*1500 |
| Compliance with standards | | | |
| Safety | IEC/EN 62040-1 | IEC/EN 62040-1 | IEC/EN 62040-1 |
| EMC | IEC/EN 62040-2 | IEC/EN 62040-2 | IEC/EN 62040-2 |
| Performance | IEC/EN 62040-3 | IEC/EN 62040-3 | IEC/EN 62040-3 |
| Certification | CE | CE | CE |

*The specification and pictures are subject to change without notice.



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