

POWER EDGE ONLINE UPS



POWER EDGE ONLINE UPS – 10–20 kVA, 3-Phase Input / 1-Phase Output Rack UPS

High-Performance Online Double Conversion UPS

The **QUANT POWER EDGE Series PE-RT010-3X / PE-RT015-3X / PE-RT020-3X** is a high-performance online double-conversion UPS range designed to provide reliable and continuous power protection for critical IT, ELV, commercial and industrial applications.

Available in **10 kVA, 15 kVA and 20 kVA** capacities, the series supports flexible 1P/1P and 3P/1P operation and provides a stable single-phase output for mission-critical connected equipment. The factory platform is specified for 1P/1P and 3P/1P online double-conversion operation.

With **output power factor 1.0**, wide input voltage tolerance and advanced three-level topology, the UPS is engineered for high load adaptability, efficient operation and dependable performance under varying utility conditions.

Intelligent battery management, configurable external battery quantities and communication options make the series suitable for applications requiring extended runtime, centralized monitoring and reliable backup power.



KEY FEATURES

- **True Online Double Conversion**
Provides continuous and stable power conditioning for critical connected loads.
- **10–20 kVA Power Range**
Available in 10 kVA, 15 kVA and 20 kVA models for different application requirements.
- **Flexible Input Configuration**
Supports 1P/1P and 3P/1P operating configurations.
- **Output Power Factor 1.0**
Provides high usable output capacity and strong load adaptability.
- **Advanced 3-Level Topology**
Designed to provide improved system performance and operating efficiency.
- **Wide Input Voltage Range**
Handles a broad range of incoming utility voltage conditions.
- **High Efficiency**
Efficiency reaches up to 95% in normal mode and 98% in ECO mode.
- **Intelligent Battery Management**
Supports configurable external battery arrangements for different runtime requirements.

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KEY FEATURES

- **High Load Adaptability**
Designed to operate with linear, non-linear and half-wave loads.
- **Zero Transfer to Bypass**
Specified transfer time from inverter to bypass: 0 ms.
- **Fault Waveform Recording**
Automatic fault waveform recording assists system analysis and troubleshooting.
- **Self-Aging Function**
Integrated self-aging functionality helps reduce energy consumption during testing.
These characteristics are directly stated in the factory datasheet.

TECHNICAL SPECIFICATIONS

MODEL	PE-RT010-3X	PE-RT015-3X	PE-RT020-3X
Rated Power	10 kVA	15 kVA	20 kVA
Operation	1P/1P / 3P/1P Online Double Conversion		
Input Voltage Range	190–499 VAC (L-L)		
Input Power Factor	≥0.99		
Input Frequency Range	40–70 Hz		
Output Frequency	50/60 Hz, self-adaptive		
Output Power Factor	1		
Rated Output Voltage	220/230/240 VAC		
Load Regulation	±1%		
Output THDu – Linear Load	≤1%		
Output THDu – Non-linear Load	≤3%, according to IEC 62040-3		
Transfer Time – INV to BYP	0 ms		
Efficiency – Normal Mode	Up to 95%		

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TECHNICAL SPECIFICATIONS

MODEL	PE-T020-3X-40B	PE-T020-3X-80B	PE-T020-3X
Efficiency – ECO Mode	98%		
Noise @ 1 metre	<55 dB	<62 dB	<62 dB
Crest Factor	3:1		
Dimensions W × D × H	440 × 730 × 170 mm (4U)		
Weight	26 kg*		

The factory table gives the three rated capacities, electrical values, efficiency, noise figures, battery configuration, communications, dimensions and a 26 kg weight entry.

Important factory confirmation: the source sheet visually presents **26 kg as a common table value**, but I recommend having the factory explicitly confirm whether 26 kg applies to **all three models** before Quant publishes it.

BATTERY, OVERLOAD & COMMUNICATION

BATTERY SYSTEM

Battery Type: External battery system

Battery Quantity: 16–24 batteries, configurable

Nominal / Rated DC Voltage: 192 VDC default, configurable

Standard Maximum Charging Current: 5A

Optional Charger: 12 A charger

The external battery configuration, 16–24 battery setting, default 192 VDC system and 5 A charging value are stated in the factory specification.

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BATTERY, OVERLOAD & COMMUNICATION

OVERLOAD CAPABILITY

Load Level Supported Duration

110% load: 10 minutes

125% load: 1 minute

150% load: 30 seconds

COMMUNICATION & CONTROL

Standard Interfaces

- RS232
- RS485
- EPO

Optional Interfaces / Accessories

- SNMP Card
- AS400 Card
- Parallel Kit
- USB
- 12 A Charger
- Air Filter
- Single Input Kit

These standard and optional interfaces correspond to the factory datasheet.

COLD START

Cold-start output frequency: 50/60 Hz default

I would ask the factory to confirm this wording before final artwork because the original table associates “**Cold start**” with “**Default output 50/60Hz**”, but does not explain the function in more detail.

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APPLICATIONS

The QUANT POWER EDGE 10–20 kVA Rack UPS range is suitable for critical power protection across applications including:

- Government IT & Data Rooms
- Finance and Banking
- Enterprise IT
- Data Centres and Server Rooms
- ELV & Security Systems
- CCTV Systems
- Access Control Systems
- Networking Infrastructure
- Education
- Transportation
- Broadcasting & Telecommunication
- Medical & Healthcare
- Energy & Industrial Applications

Your current Quant Power Edge datasheet uses a similar application-oriented final page covering government IT, banking, enterprise IT, education, transportation, healthcare, broadcasting and industrial environments, so this structure is consistent with the Quant format.

ORDERING INFORMATION

Model	Description
PE-RT010-3X	QUANT POWER EDGE Online UPS, 10 kVA, 3-Phase Input / 1-Phase Output, 4U Rack
PE-RT015-3X	QUANT POWER EDGE Online UPS, 15 kVA, 3-Phase Input / 1-Phase Output, 4U Rack
PE-RT020-3X	QUANT POWER EDGE Online UPS, 20 kVA, 3-Phase Input / 1-Phase Output, 4U Rack

