

Ultron IPT Series UPS

Three-phase, 20-200 kVA, 400 Vac

Redefining Reliability in Uncertainty

In the age of Industry 4.0, the integration of advanced sensors, controllers, and robotics has transformed manufacturing into a more electro-intensive sector than ever before. Ensuring stable and continuous power is now crucial for business continuity. The IPT series, an industrial transformer-based UPS, employs a Power Factor Correction (PFC) converter, replacing the traditional 6-pulse and 12-pulse rectifier structures. This upgrade enhances both input Total Harmonic Distortion (THDi) and input power factor, helping you save dramatically on frontend investment while providing unrivaled reliability in challenging environments.



Unrivaled Resilience

- Output Zig-zag transformer provides solid load galvanic separation, withstands heavier unbalanced loads, and delivers full kVA output capacity
- Manages reverse energy from heavy motor braking without extra braking units, ensuring continuous uninterrupted operation
- Excellent short-circuit capability from load: 3.3 times the rated current, 35% beyond a conventional transformerless UPS
- Industrial robust mechanical design provides enclosure protection level up to IP43 (optional), and resists water, liquids, conductive dust, high temperatures and earthquakes
- Key component redundancy ensures uninterruptible operation

Cost Efficiency

- Active Power Factor Correction dramatically reduces input current harmonics (THDi < 3%), minimizing distortion to upstream equipment, and optimizes frontend investment from generator, cabling and breaker, eliminating the cost of additional harmonic filters and aiding factory compliance with energy regulations
- Surpassing input power factor > 0.99 exceeds industrial UPS standards, minimizing energy waste consumption and optimizing system efficiency
- Maximizes UPS performance and lifespan with self-diagnosis and key component analysis

Simple Management

- Easy to use: waterproof 10" color touchscreen (IP54)
- Easy to maintain: supports full front access
- Easy to install: provides both bottom and top (optional) cable entry



Industrial



Oil & Gas



Chemical
Industry



Transportation



Healthcare



Technical Specifications

Model	IPT-	20K	30K	40K	50K	60K	80K	100K	120K	160K	200K
Power Rating		20 kVA 18 kW	30 kVA 27 kW	40 kVA 36 kW	50 kVA 45 kW	60 kVA 54 kW	80 kVA 72 kW	100 kVA 90 kW	120 kVA 108 kW	160 kVA 144 kW	200 kVA 180 kW
Parallel Configuration		Up to 8 units									
INPUT											
Nominal Voltage		380/400/415 Vac, 3P4W+PE/3P3W+PE									
Voltage Range		324-477 Vac (100% load); 286-324 Vac (with derating to 70-100% load)									
Frequency Range		40-70 Hz									
Total Harmonic Distortion (THDi)		< 3%									
Power Factor		> 0.99 (100% load)									
OUTPUT											
Nominal Voltage		380/400/415 Vac, 3P4W+PE (3P3W+PE optional)									
Voltage Regulation		±1% (static); ±3% (dynamic)									
Frequency		50/60 ± 0.05 Hz									
Total Harmonic Distortion (THDv)		< 2% (linear load); <5% (non-linear load)									
Power Factor		0.9									
Permitted Load Power Factor		leading 0.8 to lagging 0.7 (without derating)									
Overload Capability		≤ 110%: 60 min; 111-125%: 10 min, 126-150%: 1 min, >150%: 1 sec									
Current Crest Ratio		3:1									
EFFICIENCY											
Online Mode		Up to 94.5%									
Eco Mode		Up to 97.5%									
BATTERY											
Battery Type		VRLA/Lithium-ion									
Nominal Voltage		480 Vdc									
Quantity		36-44 pcs									
Operational Voltage Limits		346-638 Vdc									
Maximum Charge Current		11 A	13 A	15 A	17 A	23 A	30 A	38 A	45 A	60 A	75 A
COMMUNICATION INTERFACE											
Display		10-inch color LCD touchscreen									
Port		USB port x1, RS-232 x1, Input dry contacts x4, Output dry contact x6, Network port x1, REPO x1, Modbus (RS-485) x1									
Remote Emergency Power Off (REPO)		Standard									
Protocols		SNMP, Modbus RTU, Modbus TCP/IP, HTTP(S), SNMP, SMTP, DHCP									
PHYSICAL											
Dimensions (W x D x H)		600 x 830 x 1420 mm						800 x 830 x 1570 mm		1200x 830x 1700mm	
Net Weight		336 kg		404 kg		456.5 kg		593 kg		1200 kg	
ENVIRONMENT											
Operating Temperature		0 to 40°C									
Humidity		0-95% (non-condensing)									
Altitude		0-2,000 m (derating 1%/100m from 1,000-2,000 m)									
Storage Temperature		-20 to 70°C									
Storage Humidity		0-95%									
Ingress Protection Level		IP20, IP43 (optional)									
CONFORMANCE											
Safety		CE									
EMC		IEC 62040-2									
Performance		IEC 62040-3									
Sustainability		RoHS, REACH									
FEATURES											
Standard		Cold start, Battery shunt trip, Frequency conversion, Power walk-in									
Optional		Synchronized multiple bus (SMB), Backfeed protection with contactor, Software integration with Delta Lithium-ion battery BMS, DC battery ground fault detector									

All specifications are subject to change without prior notice.



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