Robust and compact design for medical applications

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continuous power availability

PremiumTower MS
**Medical Special
Three-phase UPS 80-250 KW**

Maximized Flexibility

Matching battery cabinets
For applications that require an extended runtime, matching battery cabinets are available.

Battery compatibility
PremiumTower MS is compatible with various battery technologies and other types of energy accumulators including:

- Lead acid
- Gel
- NiCd
- Lithium
- Flywheels

Dual or single input feed
PremiumTower MS is available with the option of two independent AC sources to further increase the power availability of the installation.

Flexible battery blocks
The flexibility in the number of battery blocks (30 to 50) eliminates the need to oversize the batteries and allows system designers to optimize cost versus autonomy time.

Unbeatable Efficiency
96.6%

Increased nominal rating
(kW = kVA)

Near unit input power factor
at full or partial loads

Compact mechanics
with only 0.36 m2 for 120 kW

Against the wall positioning

Ease of service
with front access only

5 times higher charging
current than typical
standalone UPS

30 to 50 **Flexible Battery Blocks**

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Power density Up to
415KW/m²

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Scalable and robust design
for medical imaging power protection

A clean, continuous power supply is critical to ensure the availability of Magnetic Resonance Imaging (MRI), Computed Tomography scanners (CT), and other Medical Imaging equipment. **PremiumTower MS** is a Swiss made three-phase, online double-conversion Uninterruptible Power Supply designed to protect Medical Imaging applications.

From 80 to 250 kW, **PremiumTower MS** offers scalability of up to 7.5 MW with front access serviceability and zero clearance. **PremiumTower MS** delivers the highest quality power protection for MRI, X-Ray, CT, Ultrasound, and imaging equipment where power performance, reduced footprint, and flexibility are essential.

Advanced Performance

High reliability by design
Three independent power converters increase system reliability and provide power continuity even in cases of power component failure.

Market leading charging current
With the ability to provide up to 5 times more charging current than a typical standalone, **PremiumTower MS** reduces the total system cost by eliminating the need for external battery chargers.
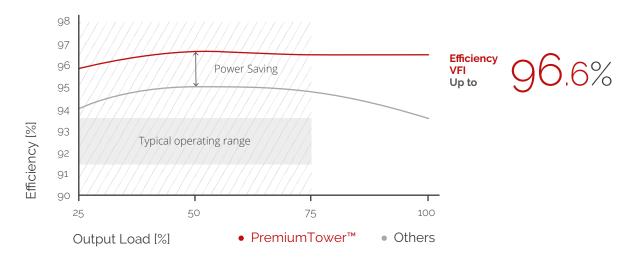
High Inrush Current support
PremiumTower MS is designed to support the high inrush currents (pulses) required by Medical scanners and imaging equipment.

Line impedance
The image quality of Medical imaging scanners relies upon an electrical supply with a low impedance as provided by **PremiumTower MS**.

Lowest Total Cost of Ownership

PremiumTower MS delivers unbeatable energy efficiency in a robust and compact design.

Efficiency VFI Up to 96.6%

High efficiencies in VFI and ECO mode
PremiumTower MS provides optimised partial and full load efficiencies of up to 96.6% in online double-conversion mode. In Ultra-Safe ECO mode, the UPS provides an excellent power quality with 99.4% efficiency.

Against the wall and Minimized footprint
From 0.36 m2 (for 80 - 120 kW) to 0.6 m2 (for 160 - 250 kW), **PremiumTower MS** optimises valuable floor space, eliminates the cost of the battery cabinet, and simplifies the installation.

Easy to service

Minimised maintenance and repair time contribute to keeping the systems' high availability.

Front access
Front access serviceability enables restricted space installations and removes the need for movement and relocation of the UPS during maintenance.

User-friendly display
The display and LED interface (optional touchscreen) give immediate visibility to the status of the UPS.

Swappable plug and play internal components
Critical components are easily swappable, reducing repair time and costs.

Always connected
Remote monitoring allows for close control of the UPS parameters in real-time, reducing the risk of downtime and allowing for preventative maintenance.

Communication Features

Compensated battery
charging Temperature probe

Remote monitoring
Graphical display

SNMP, Modbus, ModBus over IP
Slide-in adaptors

Generator operation mode
Auxiliary contacts

Simplified service
RS232 and Bluetooth app

Output general alarms
Dry contacts

Programmable input and output
Dry contacts

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PremiumTower MS — Medical Special

	Model	UPS-PT080-E40-F0-MS	UPS-PT100-E40-F0-MS	UPS-PT120-E40-F0-MS	UPS-PT160-E40-H0-MS	UPS-PT200-E40-H0-MS	UPS-PT250-E40-H0-MS
General Data	Product name	PremiumTower MS UPS					
	Topology/Technology	Online double conversion					
Input — Mains	Input Wiring	3Ph+N+PE					
	Rated Voltage	380/400/415Vac					
	Voltage Range	For loads <100% (−25%, +20%), <80% (−32.5%, +20%), <60% (−35%, +20%)					
	Input Frequency	40-70 Hz					
	Total Harmonic Distortion	THDi<3% for linear load, THDi<5% for nonlinear load					
	Input Power Factor	0,99					
Input — Bypass	Input Wiring	3Ph+N+PE					
	Rated Voltage	380/400/415 Vac					
	Change over tolerance	±30…±10% (Voltage) (According to VFI-SS-111)					
	Input Frequency	50/60 ±2/4% (selectable)					
Battery	Rated Voltage	360-480 Vdc (the number of batteries can be selected)					
	Batteries (12V)	Flexible from 30 to 50					
	Type	Lead-Acid/NiCad/Lithium					
	Blocks [LA]/Cells[NicAd]	Flexible: 30…50					
	Charger (Amp)	64	80	96	120	120	120
Output — Inverter	Output Wiring	3Ph+N+PE					
	Nominal Power [kVA]	80	100	120	160	200	250
	Nominal Power [kW]	80	100	120	160	200	250
	Voltage	380/400/415 Vac±1%					
	Frequency	Tracking the bypass input (Online Mode); 50/60 Hz±0.1% (Battery Mode)					
	Waveform	Sine wave (THDv<2% for linear load; THDv<3% for non-linear load)					
	Output Power Factor	1					
	Efficiency	96,6%					
	MRI load support	**300A 10ms**	**375A 10ms**	**450A 10ms**	**780A 10ms**	**780A 10ms**	**780A 10ms**
	CT scanner load support	120kW (60 seg)	150kW (60 seg)	180kW (60 seg)	375kW (60 seg)	375kW (60 seg)	375kW (60 seg)
	Short circuit capability	3 x IN					
Output — Bypass	Efficiency	99,4%					
Environment	Operating Temperature	0-40°C (No power derating)					
	Storage Temperature	-40-70°C					
	Relative Humidity	0%-95% (No condensing)					
	Maximum Operating Altitude	1000 m. Above 1000 m, derating 1% for each additional 100 m					
	Audible Noise	<65dB					
Others	Dimensions (H x W x D) [mm]	F0: 1990 x 600 x 600 H0: 1990 x 900 x 682					
	Colour / Protection Level	RAL 7024 (Graphite grey) / IP20					
	Certifications	EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; RoHS					
	Communications	1 x RS232, 2 x Dry In, 1 x Dry Out, 2x Expansion slots. 6 x Dry Output contacts, 4 x Dry Input contacts, Bluetooth, SNMP Slot					

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