KOHLER MIPS

Medical Isolated Power Supply for Electrical Medical IT Systems

KOHLER POWER uninterruptible

Premium quality, high specification isolated power supply (IPS) designed for medical electrical IT systems.

Easily integrates with KOHLER UPS and generator systems, and backed by Kohler's best-in-class* support.

The KOHLER MIPS system delivers patient safety and power availability backed by the reliability and support synonymous with Kohler, a global company that has been providing innovative power solutions since 1921.

Built in the UK and designed from the outset to fully meet or exceed the requirements of UK HTM-06-01 for use in Medical Group 2 locations, the KOHLER MIPS system isolates supplies from earth, ensures continuity of power in the event of a first fault, and monitors the system for abnormal conditions. Status and alarms are reported through a range of modern, highly featured but easy to use monitoring and control panels.

Engineered to complement the many KOHLER UPS and KOHLER generator systems installed in hospitals and other healthcare facilities, systems may be configured with four different levels of power distribution (6, 12, 18 or 24 MCBs), giving flexibility of use across locations including:

- Operating rooms
- Intensive care rooms
- MRI suites
- Recovery rooms
- Therapy rooms

*Verified 2018–2021 via Satmetrix survey and benchmarking. Satmetrix is a trademark of NICE Ltd.

Design features

MIPS front panel
Indicates input from independent sources.

Maintenance bypass switch
Each MIPS system is provided with a rotary break before make Maintenance Bypass Switch (MBS). The MBS allows the output to be connected to the ATS, or directly to the primary supply or the secondary supply; the switch also allows the output to be isolated OFF.

Insulation monitor
Insulation monitor and earth fault detection with alarm output, test function and engineer's display.

Transfer relay
Every MIPS system can be supplied by two different source supplies. The transfer system provides a fast changeover between supplies.

Output breakers
The output distribution can be ordered as 6, 12, 18 or 24-way double pole MCBs.

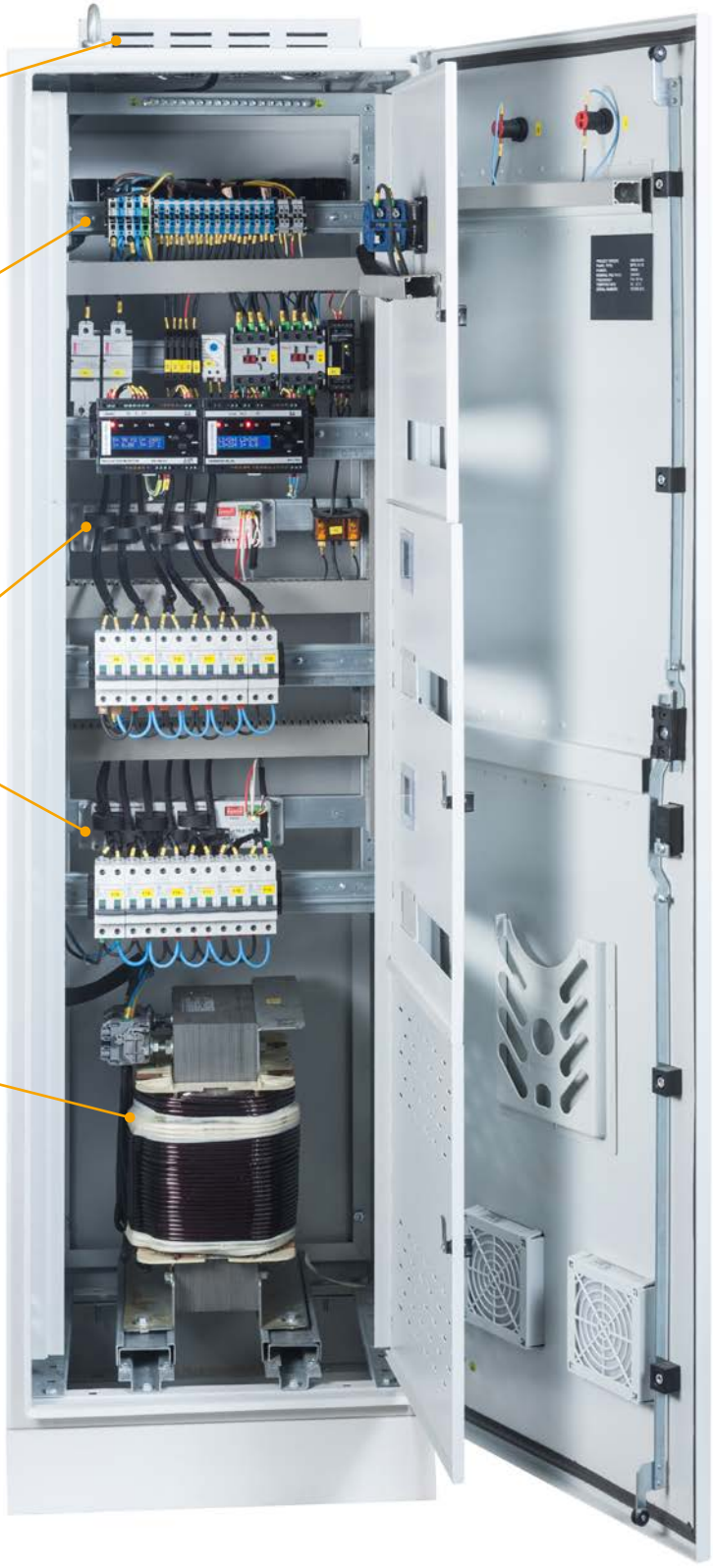
IP41 construction
Lockable IP41 external cabinet assures adequate ventilation via easily maintained dust filters.

Air circulation
Dual fan top assembly improves the overall efficiency of the system and advances independent component heat dissipation.

Easy installation
Top entry cable glands provide easy access to the terminals for all power, load and monitoring cable infrastructure.

Fault detection system (FDS)
Fault detection system with integrated current transformers detects insulation faults in IT systems. Links to insulation monitor panel.

Transformer
Medical Isolation Transformer compliant with EN 61558-2-15 Standards for supplying critical loads. A static screen isolates the secondary winding from the primary winding and fixed angle transformer core.

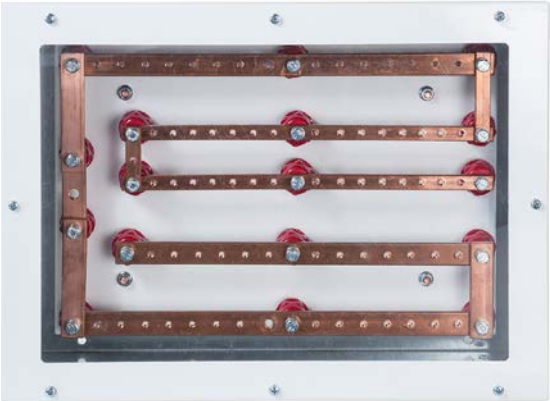


Additional system components

Equipotential Bonding Busbar (EBB)

In Medical Locations of Group 1 and Group 2, additional earthing requirements are set out in section 710 of BS7671.

These include supplementary equipotential bonding and supplementary equipotential bonding connection points along with an associated EBB. Available in wall or flush mounting formats.



Local Alarm Panel (LAP)

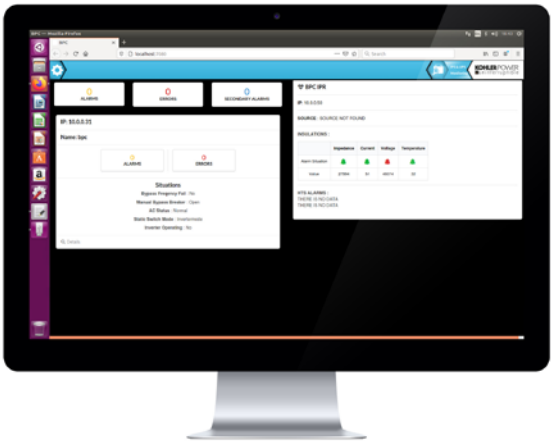
With high impact visual and audible notifications, an LAP is required for each MIPS to communicate status alarms locally and to the network.

The LAP can be installed on the IPS itself or in various Medical Locations, whilst additional LAP units can be installed in other locations to display information from 1-6 MIPS.

Central Alarm Panel (CAP)

The Central Alarm Panel provides centralised monitoring of all MIPS and UPS equipment within the healthcare facility.

A web browser allows authorised users to access the virtual panel from anywhere on the facility network.



Operating Room Panel (ORP)

Based around a sophisticated touch screen, the Operating Room Panel not only conveys MIPS and UPS information but also offers easy, convenient control of environmental conditions, audio and medical devices.

Surgical teams can also use the panel to communicate with other medical professionals using its built-in, high voice quality hands-free phone.

Technical specification

MODEL	MIPS-10-6	MIPS-10-12	MIPS-10-18	MIPS-10-24
Power rating	10 kVA	10 kVA	10 kVA	10 kVA
Input				
Output voltage	230 VAC			
Frequency range	50 Hz / 60 Hz			
Isolation level	3 kV / 1 min			
Output				
Output protection	Miniature Circuit Breaker (MCB)			
Output distribution	6 way	12 way	18 way	24 way
Alarm output	Insulation fault / Overload / Over temperature			
Functional test	Advanced insulation fault			
Enclosed leakage current	<0.5 Ma			
Isolation fault detection period	<1 second			
General				
Cabinet protection	IP 41			
Operating temperature	0℃ to +50℃			
Storage temperature	-15℃ to +70℃			
Ventilation	Dual fan			
Management software	Isolation resistance by LCD screen			
Transfer system	Automatic Transfer Switch (ATS) via contactor			
Transfer time	<50 ms			
Response rate	50 – 500 kΩ			
Overall heat dissipation	<500 W			
Finish colour	RAL9003 (signal white)			
Dimensions, W x D x H	500 mm x 500 mm x 1750 mm			
Net weight	134 kg		135 kg	

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