

## Medical Isolated Power Supply (MIPS)

Electrical Medical IT systems  
10kVA

» Patient safety

» Absolute reliability

» Power availability

BPC Energy MIPS products are suitable for various medical locations, including:

>> Operating Rooms

>> Intensive Care Rooms

>> MRI Rooms

>> Recovery Rooms

>> Therapy Rooms

BPC Energy range of Medical Isolated Power Supply (MIP) products are electrical Medical IT systems which are isolated from earth and enable insulation maintenance faults to be monitored. These MIPS systems are used in Medical Group 2 locations, according to HTM06-01-2017 to minimise risk of failure so that, in the event of a first fault to earth, supply continuity is maintained.

The purpose of MIPS products are:

- ✓ Providing PATIENT safety
- ✓ Reducing electrical shock hazard
- ✓ Reducing tripping of breakers during earth fault
- ✓ Providing monitoring and alarms for normal and abnormal conditions



## Medical Isolated Power Supply (MIPS) Features



### INPUT FUSE PROTECTION

### TRANSFER RELAY

The MIPS system can be supplied by two different power sources. The transfer system allows for quick changeover between sources.

### INSULATION MONITOR

The MIPS system is fitted with an insulation monitor and earth fault detection system.

### OUTPUT BREAKERS

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

### INPUT SOURCE INDICATORS

Indicates input from independent sources

### MAINTENANCE BYPASS SWITCH

The 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.

### IP54 CABINET CONSTRUCTION

The MIPS cabinet is provided with IP54 fan vent dust filtration system at the bottom of the door with easily maintained filters.

## Medical Isolated Power Supply (MIPS) Features



### EASY INSTALLATION

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

### FAULT DETECTION SYSTEM (FDS)

Insulation fault detection device with integrated current transformers is used for detecting insulation faults in IT systems. Insulation faulty detection system consists of test device, control and indicator device, fault evaluator and current transformer.

### AIR CIRCULATION

Segregated fan assembly improves the overall efficiency of the system and advances independent component heat dissipation.

### TRANSFORMER

BPC Medical Isolating Transformer is produced to comply with EN 61558-2-15 standards for supplying critical loads. A static screen placed between the primary and secondary windings provides isolation from the fixed-angle transformer core.

### EXTENDED WARRANTY – PEACE OF MIND – 5 YEAR WARRANTY

All BPC MIPS systems come with an extended warranty subject to there being planned, preventative maintenance measure in place.

## Medical Isolated Power Supply (MIPS)

### 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), which can be surface or flush mounted.



### MEDICAL OPERATING ROOM PANEL (MORP)

Touch Screen operating room control panel offers comfort for medical personnel enabling full control of the environmental conditions and medical devices.

Surgical teams can communicate with other medical professionals using a built-in hands-free phone with high voice quality.



### MEDICAL LOCAL ALARM PANEL (MLAP)

For each MIPS system, an audible and visual alarm can be provided by the LAP system which can be installed in various medical locations ensuring power availability can be monitored by medical staff.

Effective green or yellow indicators show normal and abnormal conditions. Providing the MIPS insulation, voltage, temperature and UPS alarms.



### MEDICAL CENTRAL ALARM PANEL (MCAP)

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

Central Alarm Panel includes a web browser that can be accessed anywhere on the network.



## Medical Isolated Power Supply (MIPS)

### Technical Specifications

| MODEL                            | MIPS – 10 - 12                                 | MIPS – 10 - 18   | MIPS 10 - 24     |
|----------------------------------|------------------------------------------------|------------------|------------------|
| Power Rating kVA                 | 10                                             | 10               | 10               |
| INPUT                            |                                                |                  |                  |
| Output Voltage                   | 230VAC                                         |                  |                  |
| Frequency                        | 50/60Hz                                        |                  |                  |
| Isolation Level                  | 3KV/1MIN                                       |                  |                  |
| OUTPUT                           |                                                |                  |                  |
| Output Protection                | MCB                                            |                  |                  |
| Output Distribution              | 12 way                                         | 18 way           | 24 way           |
| Alarm Output                     | Insulation fault / Overload / Over Temperature |                  |                  |
| Functional Test                  | Advanced Insulation Fault                      |                  |                  |
| Enclosed Leakage Current         | <0.5Ma                                         |                  |                  |
| Isolation Fault Detection Period | <1s                                            |                  |                  |
| GENERAL                          |                                                |                  |                  |
| Cabinet Protection               | IP41                                           |                  |                  |
| Operating Temperature            | 0°C / 50°C                                     |                  |                  |
| Storage Temperature              | -15°C / 70°C                                   |                  |                  |
| Ventilation                      | Fan                                            |                  |                  |
| Management Software              | Isolation resistance by LCD screen             |                  |                  |
| Colour                           | RAL 9003 / RAL 7035                            |                  |                  |
| Transfer System                  | ATS via Contactor                              |                  |                  |
| Transfer Time                    | <5ms                                           |                  |                  |
| Response Rate                    | 50 – 500 kΩ                                    |                  |                  |
| Overall Heat Dissipation         | <500W                                          |                  |                  |
| Dimensions (mm)<br>WxDxH         | 500 x 400 x 1600                               | 500 x 400 x 1825 | 500 x 400 x 2050 |
| Net Weight (kgs)                 | <150                                           | <170             | <190             |

# Advanced Power Conversion Solutions

## The BPC Group

BPC is an international company operating for 25 years globally, with partners and distributors located around the world.

These regions include:

### EUROPE

UK, France, Germany, Gibraltar, Ireland, Netherlands, Malta, Norway, Portugal.

### MIDDLE EAST

Bahrain, Georgia, Iraq, Jordan, Kuwait, KSA, Lebanon, Oman, Qatar, Syria, Turkey, UAE, Yemen.

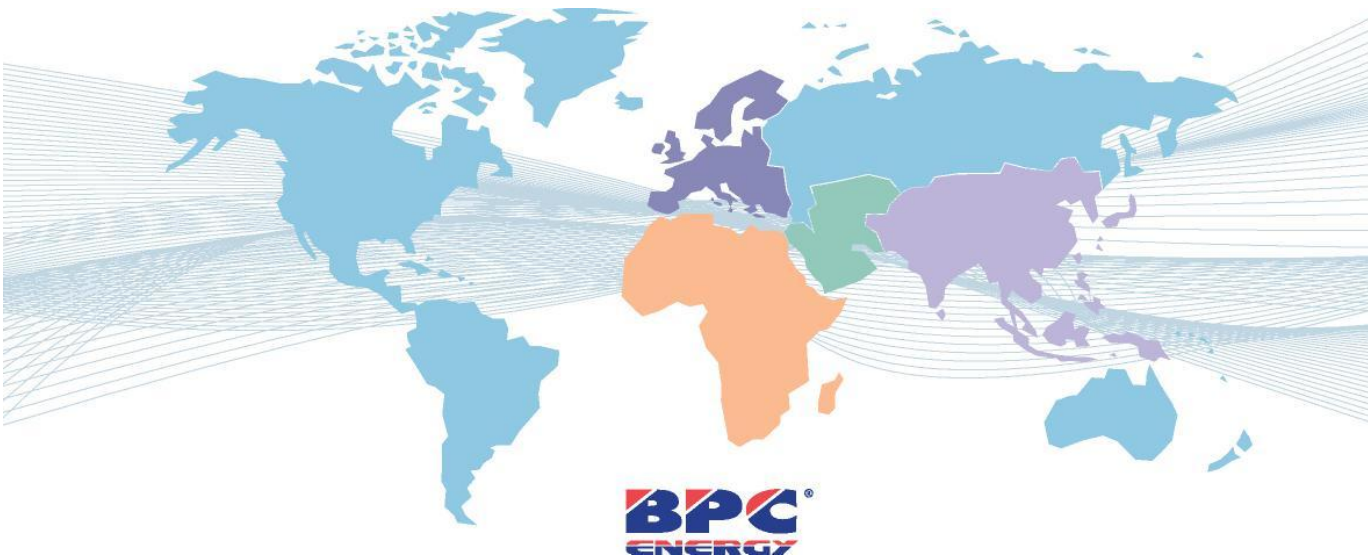
### AFRICA

Algeria, Botswana, Burkina Faso, Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, Kenya, Libya, Mozambique, Nigeria, Rwanda, Sierra Leone, South Africa, Sudan, Tanzania, Uganda, Zambia.

### FAR EAST & ASIA

India, Pakistan, Sri Lanka, Indonesia.

To ensure a high level of pre and post-sales support is offered, BPC work closely with distributors, providing key commercial and technical training whilst providing competitive costing structures tailored to specific region markets, ensuring the most suitable BPC products are offered. We pride ourselves on long standing relationships with our partners which is reflected in the ongoing support provided locally.



•The British Power Conversion Company

Authorised Distributor