

The purpose of an IPS is to protect vulnerable patients in Group 2 medical locations from the risks associated with electrical leakage currents.

Medical Locations

Medical locations are designated into Group 0, Group 1 or Group 2 in the International Standard IEC 60364-7-710 and the Institution of Electrical Engineers (IEE) Wiring Regulation Guidance Note 7, Chapter 10. Group 2 locations include operating theatres, intensive care units, special care baby units and recovery rooms.

Monitoring

In an IPS unit the outgoing electrical circuits supplying critical care and life support equipment are constantly monitored for short circuits or earth leakage faults. Any fault will result in an audio and visual alarm being raised so that remedial action can be taken by the Maintenance Technicians before unexpected loss of electrical power occurs.

Sizes

IPS units can be supplied in 3.15, 4, 5, 6.3, 8 and 10 kVA sizes and these can be single (SIPS), double (DIPS), triple (TIPS) or quadruple (QIPS) in one enclosure.

Automatic Electrical Supply

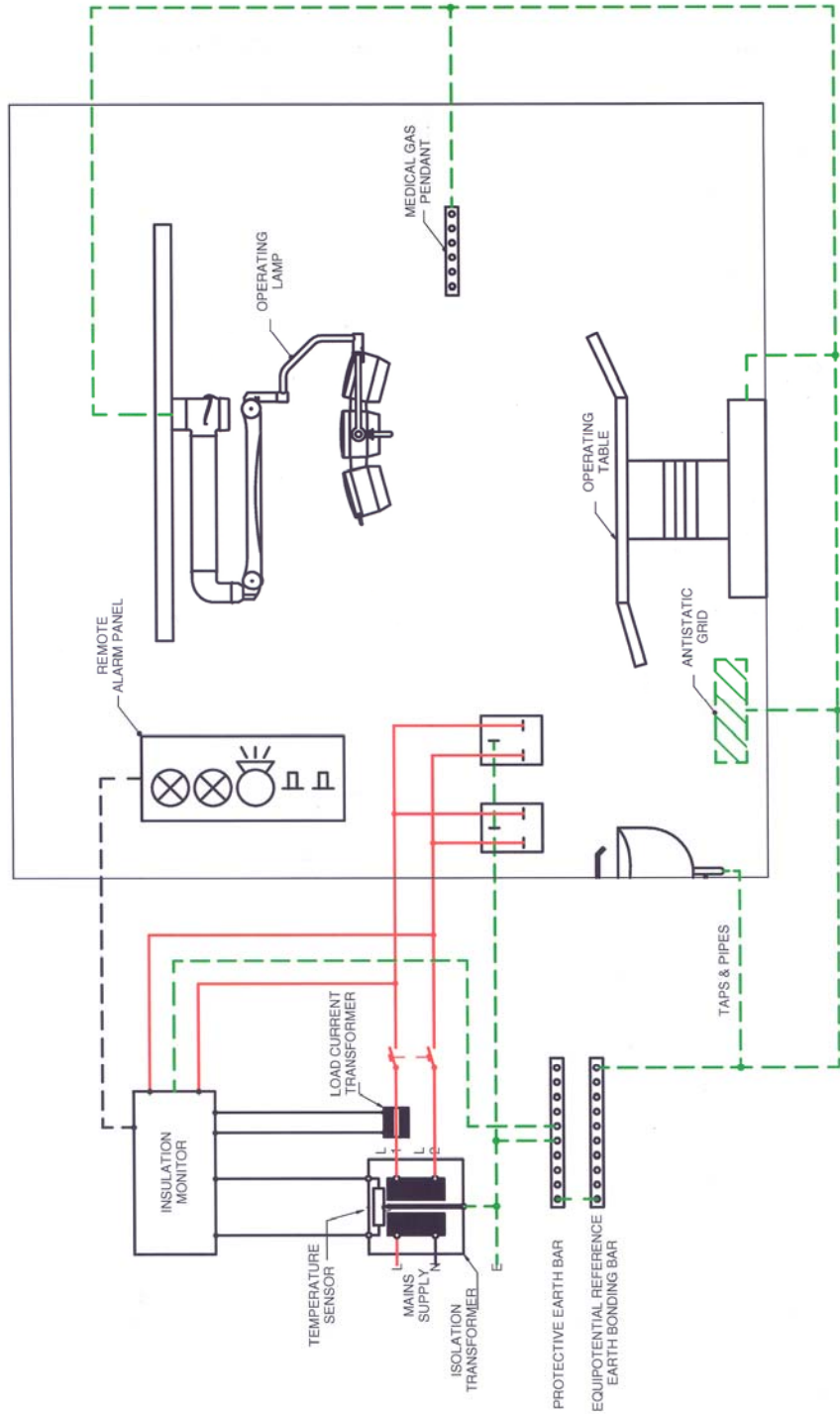
It is also a requirement of the standards that Group 2 Medical Locations shall have an automatic electrical supply available within 0.15 seconds in the event of power failure. Consequently it is usual for an IPS unit to be backed-up by an on-line UPS (uninterruptible power supply) as this will provide a 'no-break' supply source.



IPS Unit

Wiring Example

Typical IT System With Insulation Monitoring
Operating Theatre suite



BRILLIANT BY DESIGN