



PRODUCT CATALOG

Operating Theatre Panel

Secure power distribution and monitoring solution
for Hospital Operating Theatres

www.se.com/id

Life Is On

Schneider
Electric

Patient Safety

With the IEC Standard

The main objective of the electrical distribution is addressing continuity of service.

IEC 60364-7-710 2019 version clearly mentions continuity of service performance for medical locations, especially **Operating Theatre** which corresponds directly to the following definitions and classifications of safety services:

- **Group 2:** medical location where Medical Equipment or Medical Systems are used and discontinuity (failure) of the supply represents a threat to the safety of the patient and where it is critical for the life of the patient and/or the procedure cannot be repeated or where the repetition of the procedure is unreasonable.
- **Classification ≤ 0.5 s:** a UPS shall be used to provide power supply for a period of at least 3 h (reduced to 1 h in the case of Generator system).

Reduce Electric Shock And Downtime Risks

There shall be a focus on the electrical risk in the operating theatre due to patient environment.

More and more electrical equipment is being connected invasively or intrusively in the patient's body.

Due to the wet location classification, this area must be protected against indirect contact of electricity.

In operating theatres, the main solution provided to protect the patient from electric shock is managed through the Insulation neutral system (IT) as recommended in IEC 60364-7-710.

Away from the patient environment, in the operating room and intensive care unit (ICU) the TNS network is well protected by the RCD 30 mA - SI model for load sensitivity and the RCBO compact model. RCD protection must be installed for all TNS sockets and lighting systems as a minimum.

Lastly, to complete the electrical protection design, the IEC standard recommends installing the Isolated Smart Panel less than 25 m from the IT sockets.

Isolated Smart Panel

The design of the distribution board for the Operating room and Intensive care unit (ICU) is 100% IEC standard-compliant:

- IT and TNS network
- Double incomers with ATS 30 ms transfer
- Total breaker discrimination
- Isolated transformer and monitoring system
- Insulation fault location
- Monitoring system.



Isolated Smart Panel



Operating Theatre Classic Alarm display



Isolated Transformer



Power Monitoring Expert

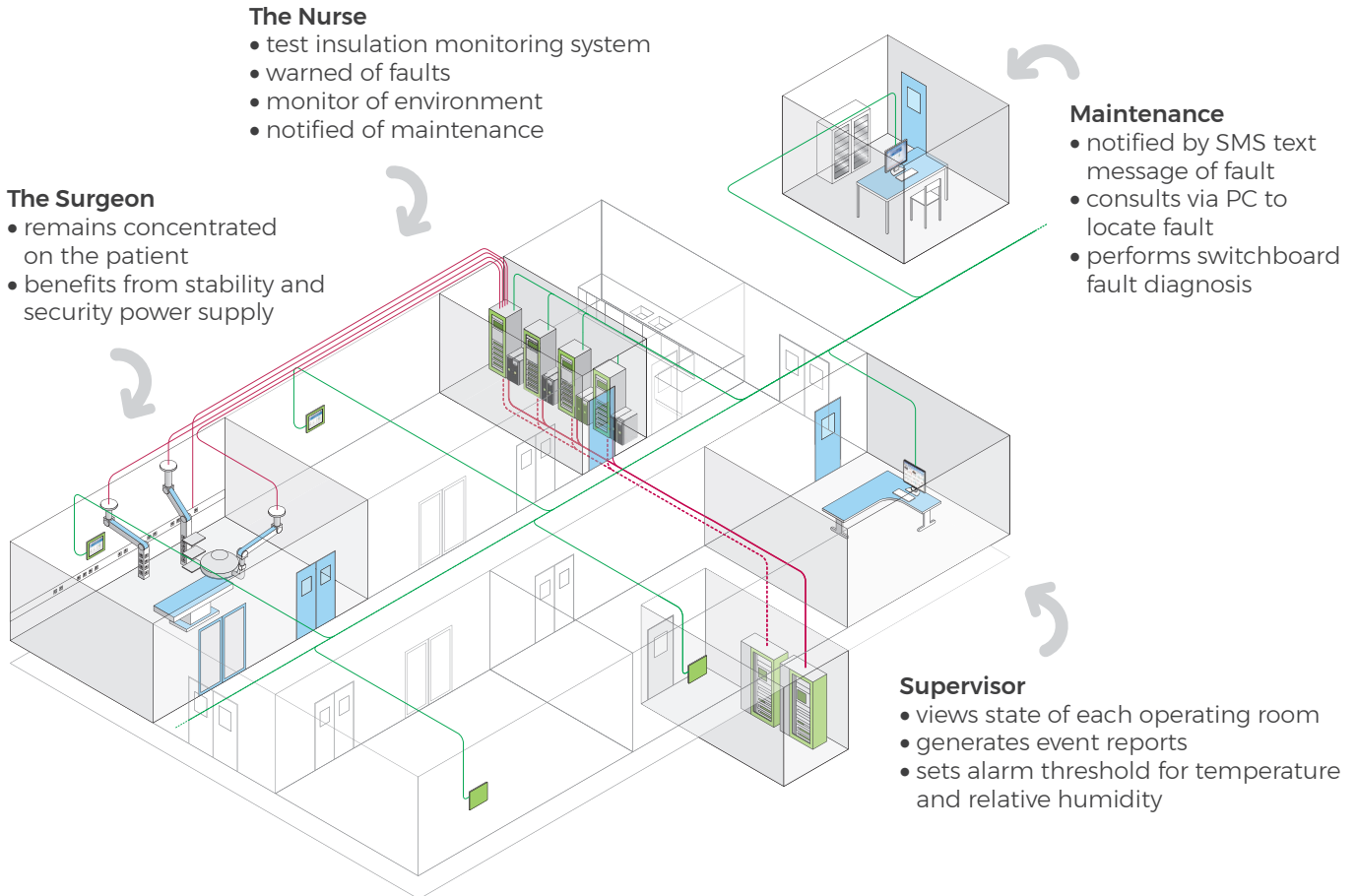
Power Monitoring Expert Energy Management System

PME increases continuity of services, even for your most sensitive medical loads. It promotes a robust preventive maintenance regimen, significantly reducing the risk of outages and increasing patient safety by minimizing complications of power failure.

It reduces recovery time in case of outage by alerting maintenance personnel in real time. Direct interface with the electrical distribution system in the operating room allows maintenance personnel to troubleshoot any alarm remotely.

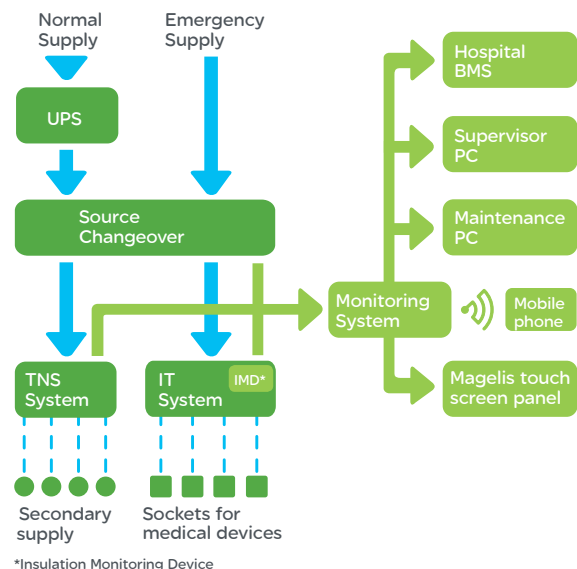
Real time information for each shareholder

Optimising level of safety and comfort for both medical and maintenance personnel



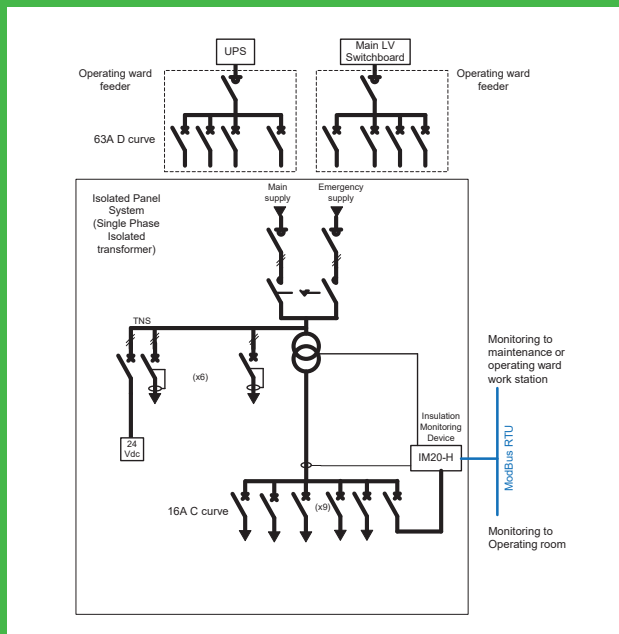
One coherent electrical system architecture dedicated to continuity of service

- An uninterruptible power supply ensures excellent power quality
- A changeover switch in the event of loss of the UPS and for maintenance
- Total coordination between equipment contributes to long life and continuity of service of the installation
- Electrical system architecture consistent with equipment and a distribution system from a single manufacturer
- Interoperability with the hospital's electrical system architecture thanks to Schneider Electric equipment



Isolated Smart Panel

Focus on architecture



Total discrimination:

- Main breaker 63A D curve
- No main breaker in the Isolated Panel
- 6 IT Sockets max in the pendent by feeder

Double sourcing:

- UPS centralized N+1 and second sourcing
- Auto change-over by 30 ms

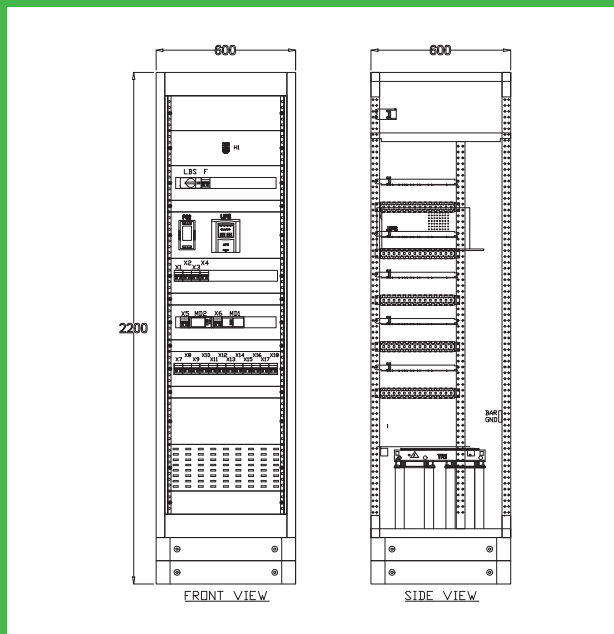
TNS RCD 30mA:

- Same continuity of services

Connected panel to reduce main time to recovery

Prisma iPM floor standing enclosures

Dimensions



Isolating Transformer available in 3 variants:

- 6.3 kVA
- 8 kVA
- 10 kVA

Offer overview:

- 1 Phase - Simple and cost effective
- 3 Phases - To better balance the load

Head Office Jakarta

Ventura Building 7th Floor
Jl. R.A. Kartini Kav. 26
Cilandak, Jakarta 12430
Ph. (62) (021) 750 4406
Fax. (62) (021) 750 4415 / 16

Customer Care Center (Jakarta)

Hotline **1500055**
F. (62) (021) 750 4415 / 16
E. customercenter.id@se.com

www.se.com/id

Life Is On

Schneider
Electric