

Increase electrical system reliability to enhance patient safety

Vigilohm insulation monitoring devices



*Every day our Vigilohm systems
enhance patient safety by protecting
critical systems from undetected
ground faults*



Hospitals

Don't compromise your IT earthing expectations

A fully integrated solution for hospitals and class 2 medical environments



The Vigilohm

range for healthcare complies with:

- IEC 60364-7-710 concerning installation standard
- IEC 61557-8 Annex A concerning IM10-H
- IEC 61557-8 Annex A and B concerning IM20-H
- IEC 61557-9 annex A concerning XD312-H fault locators

Critical healthcare applications are an essential component of our core mission to protect people and infrastructure through the safe and reliable delivery of energy. Not all IT earthing systems are created equal, and a Vigilohm system is a simple, safe and effective way to ensure safety for patients and medical support staff in operating theatres and intensive care units.

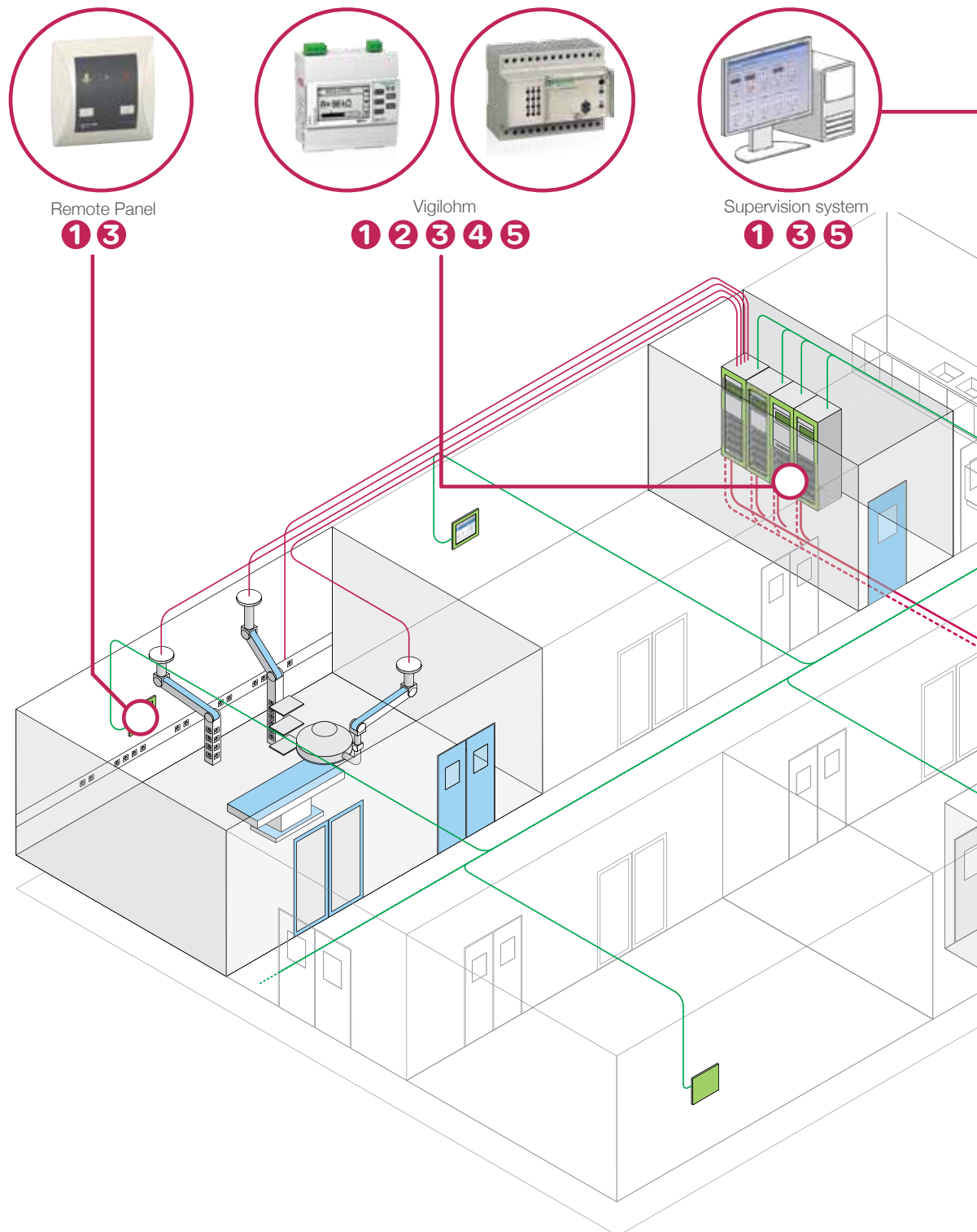
Everything about Vigilohm is designed to actively contribute to the continuous reduction of operating expenses by providing

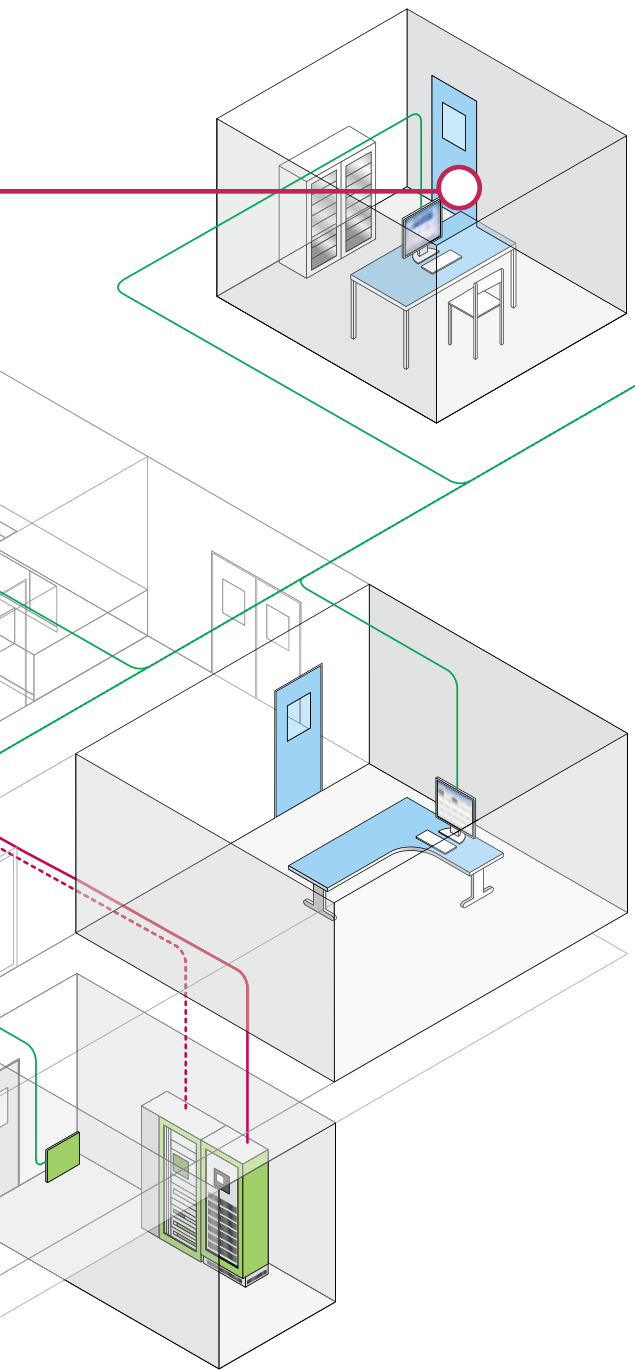
essential, timely and secure information about electrical system status and diagnostics to key staff, either on site or remotely.

Vigilohm embodies decades of expertise in network management, electrical distribution, power monitoring, communication, supervision and control, so it is natively compliant with any other Schneider Electric solution.

Improve electrical system reliability with Vigilohm devices

'The advanced monitoring functions work perfectly in the healthcare environments.'





1 Monitor

A Vigilohm IM10-H or IM20-H, associated with an HRP and/or a supervision system continuously indicates the status of the electrical installation. The insulation resistance of the installation, as well as the transformer load and temperature (IM20-H only), can be monitored for preventive maintenance.

2 Detect

The IM10-H detects all types of insulation faults, while the IM20-H adds transformer overload and overheating detection.

3 Alarm

When a fault occurs, an IM10-H/IM20-H notifies staff on its HMI, or through the HRP located in the operating theatre, or through supervision software via a Modbus communication port on the IM20-H.

4 Maintain

Faults and events are locally stored and/or reported to the supervision system by the IM10-H or IM20-H. The XD312-H indicates to facility staff the faulty feeder, for more efficient maintenance.

5 Log

The IM20-H logs up to 20 events for traceability locally, while a supervision system is able to log all information and events made available through the Modbus RS485 communication port of the IM20-H.

Reliable, high quality devices and systems hospitals around the world trust everyday

Ideal for stand alone applications, or multi-room and multi-service applications

Operating rooms require 100% power availability in order to ensure patient safety. Strict standards are in place to guarantee electrical service continuity. Vigilohm devices are fundamental to making operating room power systems safe and reliable for staff and patients. Simple and effective, only 3 devices are required to fully comply with the most demanding requirements, including full event traceability:

- an IM10-H or IM20-H insulation monitoring device
- a remote panel, based on the HRP (Hospital Remote Panel), or on the Magelis to display additional information on temperature, hygrometry, pressure/ventilation, gas levels, UPS, etc.
- a locator, such as the XD312-H to automatically identify the faulty feeder without any manual investigation

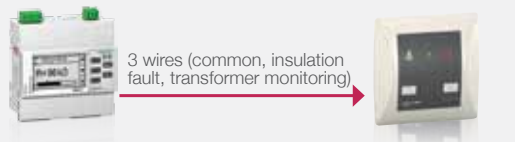
Classic configuration

In this classic, standalone insulation monitoring configuration, the IM10-H and hospital remote panel are easy to implement and operate.



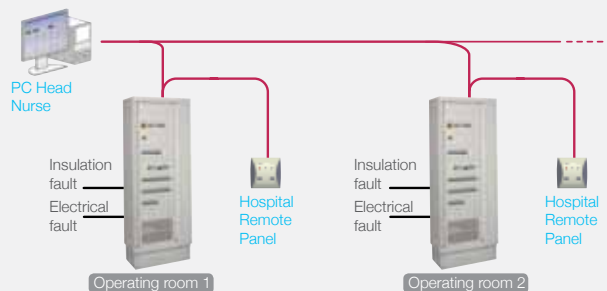
Standard configuration

In addition to insulation monitoring, the standard solution featuring IM20-H provides transformer temperature and load monitoring required by many country standards. This solution is very easy to implement and operate with direct wiring between the HRP and the IM20-H.



Advanced configuration

Advanced Vigilohm solutions deliver additional features valuable to medical staff and maintenance personnel. An HRP connected to each IM20-H provides locally the essential information for medical staff. A remote supervision system provides at a glance monitoring of electrical and environmental conditions for multiroom supervision taking advantage of the IM20-H Modbus RS486 communication port.



IM10-H

The Vigilohm IM10-H is a standalone IMD for insulation monitoring in healthcare electrical systems. Toggle a contact to display a warning through the HRP if insulation resistance drops down 50kOhm. Its large and clear display provides device configuration information and easy-to-read resistance.



IM20-H

The IM20-H is an advanced version of IM10-H that monitors transformer output current and temperature in order to prevent electrical system failures related to overheating and/or overloads. The device can report both insulation and transformer faults on its two outputs that can be easily wired to the HRP. It also offers Modbus communication for integration with remote supervision software.



Schneider Electric is an expert in the field of IT earthing networks. We have been helping healthcare organizations improve availability and protect patient safety for over 50 years.

IMDs (insulation monitoring devices) are a key component of an IT earthing system. They detect and display insulation faults and IT transformer faults (IM20-H only). Vigilohm IMDs are customized for the unique needs of healthcare environments. They are easy to use and reliable so both medical and maintenance staff can get the essential information they need to keep systems running and patients safe.

Simplicity is engineered into every device:

- DIN rail and 99-99 flush mount in a single form factor
- Convenient user interface for configuration and operation
- 8 language support
- Simple architecture without cables between the IM10-H or IM20-H and the XD312-H



Hospital Remote Panel

The HRP is the simplest way to report an electrical system fault. Three different LEDs indicate whether the power system has an insulation fault, an electrical or transformer fault, or is defect free. An audible fault alarm is enabled and the HRP also allows staff to test the installation at any time.



Magelis GOP

A Magelis interface is our most advanced insulation monitoring solution for operating theatres and intensive care units. It simultaneously displays all key information related to the medical room.



XD312-H

The XD312-H locates faults on up to 12 feeders. When installed together with an IM10-H or IM20-H, it monitors each feeder individually and when a fault is detected, reports the faulty feeder on an LED and toggles a contact.

For more information on the Vigilohm range for healthcare
visit www.schneider-electric.com

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