

# Insulation Monitoring Devices



## Medical Series

EDS 30 | IMD 30 | CTS 30 | LAP 70 | RAI 70 | HMI 70

# Insulation Monitoring Devices

## Medical Series

### LAP 70 Local Alarm Panel

LAP 70 Local Alarm Panel indicates alarms like insulation fault, overcurrent, transformer over temperature visually and audibly that are detected by the IMD 30 insulation monitoring device and stores each event with their timestamp.



#### Standards

- IEC 60364-7-710

#### Advantages

- It can store up to 150 event records thanks to its internal clock
- Remote insulation test and fault contact outputs
- Modbus RTU protocol

#### Applications Areas

- Operating rooms
- Intensive care rooms

Technical Specifications	
Brand	Aktif
Model	LAP 70
Supply Voltage	24 Vac/dc
Frequency	50/60 Hz
Warnings	Insulation fault Over current Over temperature
Fault Relay Types	NO, NC
Number of Event Logs	150
Communication Protocol	Modbus RTU
Cable Length	≤ 1000 m
Operating Temperature	-5 °C ... +55 °C
Standards	IEC 60364-7-710
Operating Temperature	-5 °C ... +55 °C
Standards	IEC 60364-7-710

### RAI 70 Remote Alarm Indicator

RAI 70 Remote Alarm Indicator monitors all alarms and events of the whole Isolated Power System and displays them on its LCD and LEDs as well as creating audible alarms.



#### Standards

- IEC 60364-7-710

#### Advantages

- Remotely monitor all alarm information detected by the Isolated power system
- Up to 150 event recording with its internal RTC
- Up to 32 supported insulation fault monitoring device
- Remote insulation test and fault contact outputs
- Modbus RTU protocol

#### Applications Areas

- Operating rooms
- Intensive care rooms

Technical Specifications	
Brand	Aktif
Model	RAI 70
Supply Voltage	24 Vac/dc
Frequency	50/60 Hz
Warnings	Insulation Fault Over Current Over Temperature
Fault Relay Types	NO, NC
Visual Warning	LEDs Graphic LCD Display
Max. Supported Insulation Fault Monitoring Device	32
Number of Event Logs	150
Communication Protocol	Modbus RTU
Cable Length	≤ 1000 m
Operating Temperature	-5 °C ... +55 °C
Standards	IEC 60364-7-710

### CTS 30 Changeover Module

CTS 30 Changeover Module is the equipment that enables to select the convenient one between two different sources feeding the isolated power panel and transfer it to the output.



#### Standards

- IEC 60947-6-1
- IEC 60364-7-710

#### Advantages

- Transfer Time: 40 ms
- Communicates with the Remote Alarm Indicator and the Local Alarm Panel with the
- Modbus RTU protocol.

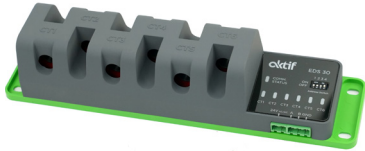
#### Applications Areas

- Operating rooms
- Intensive care rooms

Technical Specifications	
Brand	Aktif
Model	CTS 30
Supply Voltage	220 Vac
Frequency	50/60 Hz
Transfer Time	≤ 40 ms
Alarms	Source fault
Visual Warning	LEDs
Fault Relay Types	NO, NC
Communication Protocol	Modbus RTU
Cable Length	≤ 1000 m
Operating Temperature	-5 °C ... +55 °C

## EDS 30 Insulation Fault Location Device

EDS 30 Insulation Fault Location device is designed to detect the location of insulation fault in IT systems.



- Elegant designed to detect the location of insulation fault in IT systems.
- Number of channels: 6
- Remote insulation test and fault contact outputs
- Modbus RTU protocol

### Applications Areas

- Operating rooms
- Intensive care rooms

### Standards

- IEC 61557-9
- IEC 60364-7-710

Technical Specifications	
Brand	Aktif
Model	EDS 30
Supply Voltage	24 Vac/dc
Frequency	50/60 Hz
Number of Channels	6
Visual Warning	LEDs
Response Value	<0,5 mA
Response Time	<2 sn
Communication Protocol	Modbus RTU
Cable Length	≤ 1000 m
Operating Temperature	-5 °C ... +55 °C
Standards	IEC 61557-8 IEC 60364-7-710

## IMD 30 Insulation Monitoring Device

Insulation Monitoring devices are one of the most important equipment of IT Systems. It detects insulation fault in the system by constantly checking the insulation resistance level between phases and earth.

### Standards

- IEC 61557-8
- IEC 60364-7-710

### Advantages

- High measurement resolution
- Low measurement uncertainty
- Wide measurement range
- Modbus RTU protocol

### Applications Areas

- Operating rooms
- Intensive care rooms

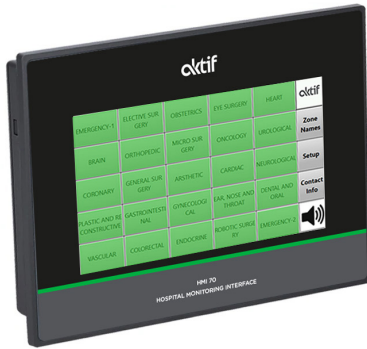


Technical Specifications	
Brand	Aktif
Model	IMD 30
Supply Voltage	24 Vac/dc
Frequency	50 / 60 Hz
Internal Resistance	≥ 240 kΩ
Insulation Measurement Range	50 kΩ ... 750 kΩ
Insulation Measurement Resolution	≤ 1 kΩ
Insulation Measurement Uncertainty	≤ 3%
Response Time	≤ 2sn
Current Measurement Range	0-50 A
Current Measurement Resolution	0,1 A
Temperature Sensor Types	NTC PTC Thermistor
Max. Supported Fault Detection Devices	4
Warnings	Insulation Fault Over Current Over Temperature
Fault Relay Types	NO,NC
Visual Warning	LEDs, LCD Display
Communication Protocol	Modbus RTU
Cable Length	≤ 1000 m
Operating Temperature	NO,NC
Standards	IEC 61557-9 IEC 61557-8 IEC 60364-7-710

# Isolated Power Systems

## MED Series

### HMI 70 Hospital Monitoring Interface



Aktif Hospital Monitoring Interface (HMI 70) is used to remotely monitor all alarm information detected by the medical isolated power system. Aktif HMI 70 communicates with Remote Alarm Indicator (RAI70) and Medical Isolated Power Panel (IG series), allowing the technical service personnel in the hospital to monitor transfer alarm, insulation fault, over-temperature fault and over-current fault information audibly and visually through a single product.

#### Standarts

- IEC 61131-2
- IEC 60068-2-27

#### Advantages

- Monitoring the entire system on a single screen
- Customizable medical site naming

#### Technical Specification

Model	HMI 70
Supply Voltage	24 Vdc
Alarms	Insulation Fault Over Current Over Temperature
Max. Supported Remote Alarm Panel	25
Visual Warning	LCD Ekran
Screen	7" TFT LCD ( 800 x 480)
Communication Protocol	Modbus RTU
Operating Temperature	0°C- 50°C
Standards	IEC 61131-2 IEC 60068-2-27



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