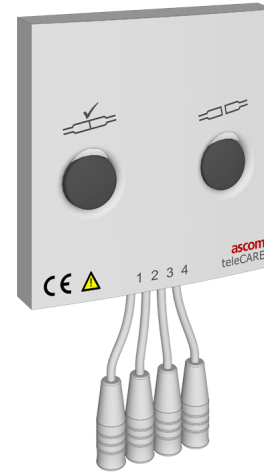


Multi Medical Alarm Module

Features

- NIMA-G4E MDD/MDR class I
NIMA-W4E MDD/MDR class I
- NIMA-G4D MDD class IIb
- Four medical alarm inputs for the distribution of alarms from medical devices
- Secure monitoring of the electrical connections with disconnect alarm
- Medical alarm test button with LED
- Intentional disconnect button with LED
- Test alarm functionality when connecting medical devices
- Unintentional disconnection and cable break alarm



Intended Use

The Multiple Medical Alarm (MMA) module (item numbers NIMA-G4E and NIMA-W4E), in combination with specific Room controller software, is intended to interface with medical devices using relay closure circuits (“primary medical devices”), the Ascom Messaging System and the teleCARE IP nurse call system, in order to provide a secondary means of automated visual and/or audible annunciating and displaying of patient alarm information to healthcare professionals, via display devices (class I).

The MMA (item number NIMA-G4D) is also, in combination with specific Room Controller (NIRC3), Room Controller software, and corridor lights (NICL2), intended to interface with primary medical devices approved for communication of alarm conditions, in order to provide automated, reliable, near real-time visual indication of alarm conditions to corridor lamps in the telecare IP nurse call system (class IIb).

The MMA does not replace or alter the behavior of the primary medical devices. When used for indication of alarm conditions, the MMA does not modify, change or add information to the alarm condition.

The MMA incorporates both hardware and software and is intended to be installed in close proximity of a patient, while the Room controller software is intended to be installed on specified hardware modules located outside the patient

area. The MMA is not intended to be used for diagnostic purposes or to come in physical contact with patients.

The MMA is intended for use by professional clinical personnel and relies on proper use, installation and operation of the communication infrastructure at the healthcare facility.

Description

The Multi Medical Alarm Module (NIMA) is a single switch module with two buttons and four medical alarm inputs for the distribution of alarms from four third party medical devices. Third party medical equipment can consist of infusion pumps, ventilators or other life supporting systems.

The NIMA has one high priority, one medium priority and two low priority inputs. The NIMA is available in gray (NIMA-G4E / NIMA-G4D) or white (NIMA-W4E).

An MDD class IIb compliant system is formed by using the NIMA-G4D in combination with the room controller NIRC3 and corridor lamp NICL2 for reliable alarm indications from medical devices to a location outside the patient room. The corridor lamp must have a visibility of at least 20 meters and must be directly visible from the nurse station staffed at all times. The NIRC3 or the NICL2 must use colors according to EN60601-1-8 (red, yellow, cyan or yellow).

Call information devices like room displays, corridor displays and other messaging devices are excluded from MDD class IIb.

The NIMA module is a teleCARE IP nurse call system peripheral device, based on the single switch module. It has four 2.5mm 2-pole TRS jack sockets for the connection of the medical devices.

The NIMA module is completely assembled and factory tested. No replacement items are necessary in this assembly and for maintenance purposes the switch module assembly is completely replaceable.

Depending on the configuration, the NIMA is placed on a double or triple back plate in combination with the required switch module. The back plate enables this switch module to be mounted over different types of back boxes.

Application

The NIMA module is designed for wall mounting. It is suitable for use in teleCARE IP systems only.

In an MDD class IIb installation the NIMA-G4D can only be connected to a bedside module (NIBM2) and a medical rail socket (NIMS2) version 2.23 or later.

In an MDD/MDR class I installation the NIMA-x4E can also be connected to a pull cord module (NIPC) version 2.23 or later.

The NIMA has one test button with multi color LED to test the medical alarm connection(s). It also has one button used for the intentional disconnection of the MMA alarm cable(s) without generating a medical disconnect alarm.

Note:

In order to fulfill the requirements of EN 60601-1-8, the use of the MMA Alarm Cable (660393) is mandatory in order to connect medical devices to the NIMA, and also an end of line (EOL) resistor must be connected at the medical device.

Warning:


Not to be installed in areas where the air pressure is below 850 millibar (approximate maximum altitude 2000m)

Not intended for use in oxygen enriched environments.

Not intended for use in rooms where flammable (anesthetic) gasses are used.

Only for sale in EU&EFTA

 NIMA-G4E
NIMA-W4E

 NIMA-G4D
Certified by Notified Body nr:2460
2460






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Technical specifications are listed on the following page

Technical Specifications

Item number	NIMA-G4D: gray (NCS S 2002-B) - MDD Class IIb
	NIMA-G4E: gray (NCS S 2002-B) - MDD/MDR Class I
	NIMA-W4E: white (NCS S 0603-G804) - MDD/MDR Class I
Dimensions:	91 x 91 x 17mm (w x h x d)
Installed depth	With backplate: 17mm
	With spacer: 42mm
Body material:	PC/ABS, Flammability class: HB
Button color:	gray (NCS S 7502-B)
Connections:	4 x 2.5mm TRS female jack socket for the connection of third party medical device(s).
Interconnection:	1 x 5-pole connector for interconnection cable (NIBM2, NIMS2 or NIPC)
	1 x 5-pole connector for interconnection cable (EXT)
Operating voltage:	5.5VDC (from the room controller)
Min. current consumption:	Idle: 7 mA
Max. current consumption:	Max: 25 mA
Environment:	Operating temperature: 0°C to +40°C / 32°F to 104°F Storage temperature: -25°C to +55°C / -13°F to 131°F Relative Humidity: 30 - 85% (non condensing)
Regulatory Compliance EU/EFTA	 NIMA-G4E NIMA-W4E  NIMA-G4D Certified by Notified Body nr:2460  VDE 0834 MDR: Regulation (EU) 2017/745, European Medical Devices MDD: Directive 93/42/EEC, Medical Devices RoHS: Directive 2011/65/EU amended by 2015/863/EU, Restriction of the use of certain hazardous substances REACH: Regulation 1907/2006, Registration, Evaluation, Authorization and Restriction of Chemicals WEEE: Directive 2002/96/EC, Waste Electrical and Electronic Equipment
Accessories and Spares:	660393 Ascom Medical Alarm Cable 660313 Extra long interconnection cable (400mm) R280921 Back plate, double - gray R281146 Back plate, double - white R280924 Back plate, triple - gray R281148 Back plate, triple - white R280926 Spacer, single with installation kit -gray R281149 Spacer, single with installation kit - white

Specifications are subject to change without notice