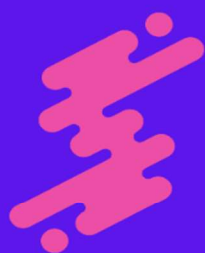TECHNICAL SPECIFICATION

SMART SYSTEM

SINCRON

Nurse call system

DESCRIPTION OF SMART SYSTEM

The Smart System is, arguably, the best cost-benefit in the market with the possibility of numerous forms of communication. Through the software, it issues reports about types and events and their respective times, on the monitoring screen it presents events in real time and it is allowing integration with Hospital Management Systems and devices such as mobile extensions, smartphones, pagers, etc.

Manufactured according to the Technical Norms of ABNT (Brazilian Association of Technical Standards) - NBR - 5410 and the ANVISA (National Health Surveillance Agency) - RDC - 50.

SYSTEM COMPOSITION:

ARTÍCULO			PRODUCTO
1	1.1		ESTAÇÃO DE LEITO SMART (FIXAÇÃO SOBREPOSTA)
	1.2		ESTAÇÃO DE LEITO SMART (FIXAÇÃO EM RÉGUA DE GASES)
2			BOTÃO DO PACIENTE COM DIM
3			ESTAÇÃO PARA BANHEIRO COM CORDEL
4			ESTAÇÃO PARA BANHEIRO INDIVIDUAL COM CORDEL
5			SINALEIRO DE PORTA DE LED´S
6			CENTRAL POSTO DE ENFERMAGEM
7			PAINEL DE MENSAGEM ALFA NUMÉRICO - REPETIDOR

8		POWER SUPPLY 12VDC 10A COD. PD051
9		CABLE CLOSING BOX CODE MT035
10		GATEWAY TCP/IP
11		MANAGEMENT AND REGISTRATION SOFTWARE CODE MT011

TABLE OF ALARMS AND HARDWARE SERVICES:

	BUTTON ACTIVATION	HOW THE ACTIVATION IS PERFORMED	DOOR SIGN		NURSING STATION BOARD
BED STATION	**Patient**	Through the headset	**FLASHING RED**		**Visual and audible alarm**
CALL / **BATH**	**Patient**	Through the cord	**RED AND**	**FLASHING BLUE**	**Differentiated visual and audible alarm**
PRESENCE IN BED	**Nursing staff**	Using the red button on the bed station	**CONTINUOUS RED LIGHT**		**Visual alarm**
HELP REQUEST (GREEN CODE)	**Nursing staff**	Through the green button station bed	**FLASHING GREEN**		**Visual and audible alarm**
PRESENCE OF HELP (GREEN CODE)	**Nursing staff**	Using the red button on the bed station	**CONTINUOUS GREEN LIGHT**		**Visual alarm**
YELLOW CODE	**Nursing staff**	Using the yellow button on the bed station	**FLASHING YELLOW**		**Visual and audible alarm**
PRESENCE OF YELLOW CODE	**Doctor (s)**	Through the red button on the bed station	**CONTINUOUS YELLOW**		**Visual alarm**
BLUE CODE	**Nursing staff**	Through the blue AND yellow button simultaneously from the bed station	**FLASHING BLUE**		**Differentiated visual and audible alarm**
PRESENCE OF BLUE CODE	**Doctor (s)**	Using the red button on the bed station	**CONTINUOUS BLUE**		**Visual alarm**
INFUSION PUMP ALARM	**Contact of pump**	Through the contact sent by the infusion pump	**RED AND**	**FLASHING GREEN**	**Visual and audible alarm**

PRODUCT DESCRIPTION:

1 – SMART BED STATION

When activated, it sends a signal to the door signal and to the Digital Central of the Nursing Station, informing the type of call, the room / bed, in addition to triggering an audible alarm.

Events and services: Bed Assistance Call; Bathroom Call; Bed Presence; Request for help; Presence of Assistance; Yellow Code; Yellow Code Presence; Emergency (Blue Code); Emergency Presence; Infusion Pump Alarm; Call Transfer.

Technical description:	- Sound and visual alarming; - Accept Customization; - Serial communication with the Central Nursing Station; - Supports up to 2 patient buttons; • White color; • Material: ABS; • Dimensions 4x2 (H=120mm x W=80mm x D=26mm); • Dimensions 4x4 (H=120mm x W=130mm x D=26mm).
Interfaces:	- 1x KRE 3T - Connection with the communication bus with the Central of the nursing station; - 2x KRE 3T- Connection with the Door Sign and Bathroom Call; - 1 x RJ11 - Connection with patient buttons; - Jack P2 - Dry contact connection (optional).

1.1 – OVERLAPPING FIXING

Overlapping fixing in a 4x2 inch box (for fixing in a 4x4 inch box, Sincron adapter code 15166 is required)

Dimensions HxWxD (110mm x 82mm x 30mm).

1.2 - FOR FIXING ON A MEDICAL GAS OUTLET LINEN

Built- in fixing in gas outlet linen: The gas outlet linen must be manufactured with the necessary hole (see measurements in the image below) for the perfect conditioning of the station.
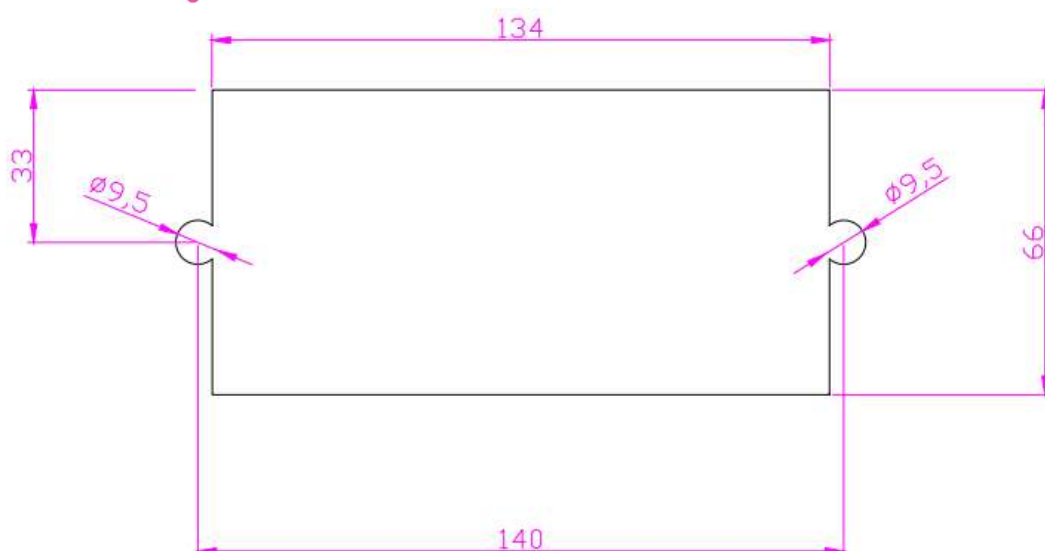
2 – SINCRON PATIENT BUTTON WITH DIM

They are lightweight, water resistant, have an anatomical design, LED for call identification, RJ11 plug and DIM connector that enable a better user experience. With a simple click, the patient activates the Central Nursing Station.

Technical description:	• Ergonomic shape; • Visual call identification; • 1,80m cable with Din-5 connector for easy disconnection, in case of cable tensioning; • RJ11 Connector - Connection to the Bed Station; • Waterproof. • White color; • Material: ABS; • Dimensions (H=70mm x W=40mm x D=40mm).

3 - BATHROOM STATION WITH CORD (for bathrooms attached to beds)

Its drive is carried out by means of a PVC string in red color. The string should be as close to the floor as possible to facilitate the activation in case of patient fall.

Fixing in a 4x2 inch box (for fixing in a 4x4 inch box, an adaptor code 15166 is required).

This model of bathroom station is connected to the nearest bed station to the bathroom.

Technical description:	• PVC cord; • Led for call identification; • Call cancellation button; • Water resistant. • White color; • Material: ABS; • Dimensions 4x2 (H=120mm x W=80mm x D=26mm); • Dimensions 4x4 (H=120mm x W=130mm x D=26mm).

4 - INDIVIDUAL BATHROOM STATION WITH CORD (for bathrooms not tied to beds)

Its activation is carried out by means of a red string. It is a system of mandatory use, determined by a Brazilian law, in bathrooms of various public and private agencies, which require accessibility.

Fixing in a 4x2 inch box (for fixing in a 4x4 inch box, an adaptor code 15166 is required).

This bathroom station model is connected directly to the MT035 Cable Lock Box.

Basic data:	• Red color PVC cord; • Led for call identification; • Call cancellation button; • Water resistant. • White color; • Material: ABS; • Dimensions 4x2 (H=120mm x W=80mm x D=26mm); • Dimensions 4x4 (H=120mm x W=130mm x D=26mm).

5 - LED DOOR SIGNAL

It can be installed over the door or on the ceiling, it has 4 colors of LEDs in high brightness, red, green, yellow and blue.

Fixing in a 4x2 inch box (for fixing in a 4x4 inch box, an adaptor code 19019 is required).

Technical description:	• Installation on wall or ceiling; • It has 4 colors of LEDs in high brightness, red (5400 mcd), green (5400 mcd), yellow (5400 mcd) and blue (5400 mcd); • White color; • Material: ABS and milk PC; • Dimensions 4x2 (H=120mm x W=80mm x D=31mm); • Dimensions 4x4 (H=120mm x W=130mm x D=31mm).

6 - CENTRAL MASTER PLUS WITH VOICE FOR NURSING STATION

Audible and visual alarm, 16 × 2 LCD display with visible area of 21mm x 96mm, shows events in real time, voice communication, dial keys for setting the address of each bed, serial communication with the bed stations, integrable with the network data TCP / IP.

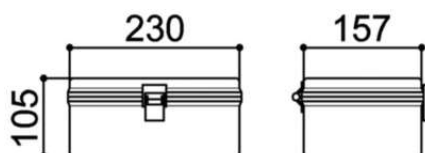| Technical description:	- Audible and visual alarm; - Desktop; - 16x2 LCD display with visible area (21mm x 96mm), shows events in real time; - Dial and configuration keys (addressing) of rooms; - It accepts Customization; - Serial communication with bed stations; - White color; - Cabinet Material: PSAI; - Label Material: Polycarbonate; - Dimensions HxWxD (95mm x 190mm x 210mm)

7 - ALPHANUMERIC MESSAGE PANEL - REPEATER

The message panel is an option to repeat the message from the Central Nursing Station. It has an audible alarm.

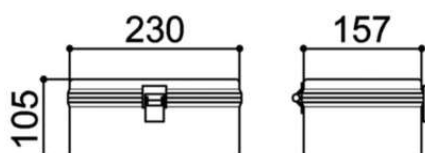| Basic data:	- Long reading range of the display; - Accepts customization; - Communication Port RS-485; - White and red color; - Material: PSAI; - Dimensions HxWxD (75mm x 575mm x 40mm).

8 - POWER SUPPLY 12VDC 10A COD. PD051

110-240VAC input, automatic selection 2A 50/60Hz. Output 12VDC 10A. Measurements in the image below (in mm).

9 - CABLE CLOSING BOX CODE MT035

Closure with 35 RJ45 Jacks. Measurements in the image below (in mm).

10 - GATEWAY TCP/IP

Network Media:	- 10BASE-T: Category UTP 3, 4, 5 cable - EIA / TIA-568 100Ω STP - 100BASE-TX: Category UTP 5, 5e cable - EIA / TIA-568 100Ω STP - 1000Base-T: UTP Category 5, 5e cable
Data rates:	- 10/100 / 1000Mbps for Half-Duplex mode, 20/200 / 2000Mbps for Full-Duplex mode
Flow control:	- IEEE 802.3x Flow Control (Full-Duplex)
Interfaces:	- 10/100/1000 Mbps RJ45 port, Auto-Negotiation, Auto MDI / MDIX - LEDs: Link / Act - 4 USB ports
	- Connection to the Sincron Software Database. - Connection with SIC Connexall Client.
Software Connections:	- 5VDC/2A Plug jack P$ 2.1.
Basic data:	- White color; - Cabinet Material: PSAI; - Dimensions HxWxD (35mm x 67mm x 97mm).

11 - MANAGEMENT AND REGISTRATION SOFTWARE CODE MT011

The software will record by type of event, indicating the time when the patient activated the handset, the time when the nurse started the service and indicated his presence in bed, the time the service ended, in addition to the calls for assistance, yellow code, blue code and bathroom call.

The Software has the Sincron monitoring screen, which simultaneously shows all events occurring and their respective status.