SMART NCS-STAFF CONSOLE (CUI-32)

CUI-32 is a desk unit with integral operating elements. It can make Direct Audio Call to each Patient Consoles (BCU-34/BCU-34N). it can also initiate emergency codes by touching one of the associated 12 programmed icon or by pressing 4 dedicated buttons on the console through connection to hospital Emergency /Group Summon System.

The Touch LCD can show up to 8 color coded Nurse Calls on the screen in Priority Order. A patient intercom panel and the connected handset/pear push can be set to "Critical" priority level using the menus on the staff console.

The incoming calls lit corresponding indicator lamps on the console along with playing the related sound alarm for notification of the staff away from the console. Patients can also initiate a 2-way full-duplex Audio call to CUI-32 through their Service Console (BCU-34/BCU-34N)

The console can connect to maximum 64 patient Intercom panels (BCU-34/BCU-34N) via the terminal box (TBX-31). It also connects to Hospital Information System (HIS), Hospital Emergency Code Calling system and corridor Display Unit (NDP-31) IP addresses through Hospital LAN .

The unfinished calls are posted on the touch LCD until they are taken care of by the staff.
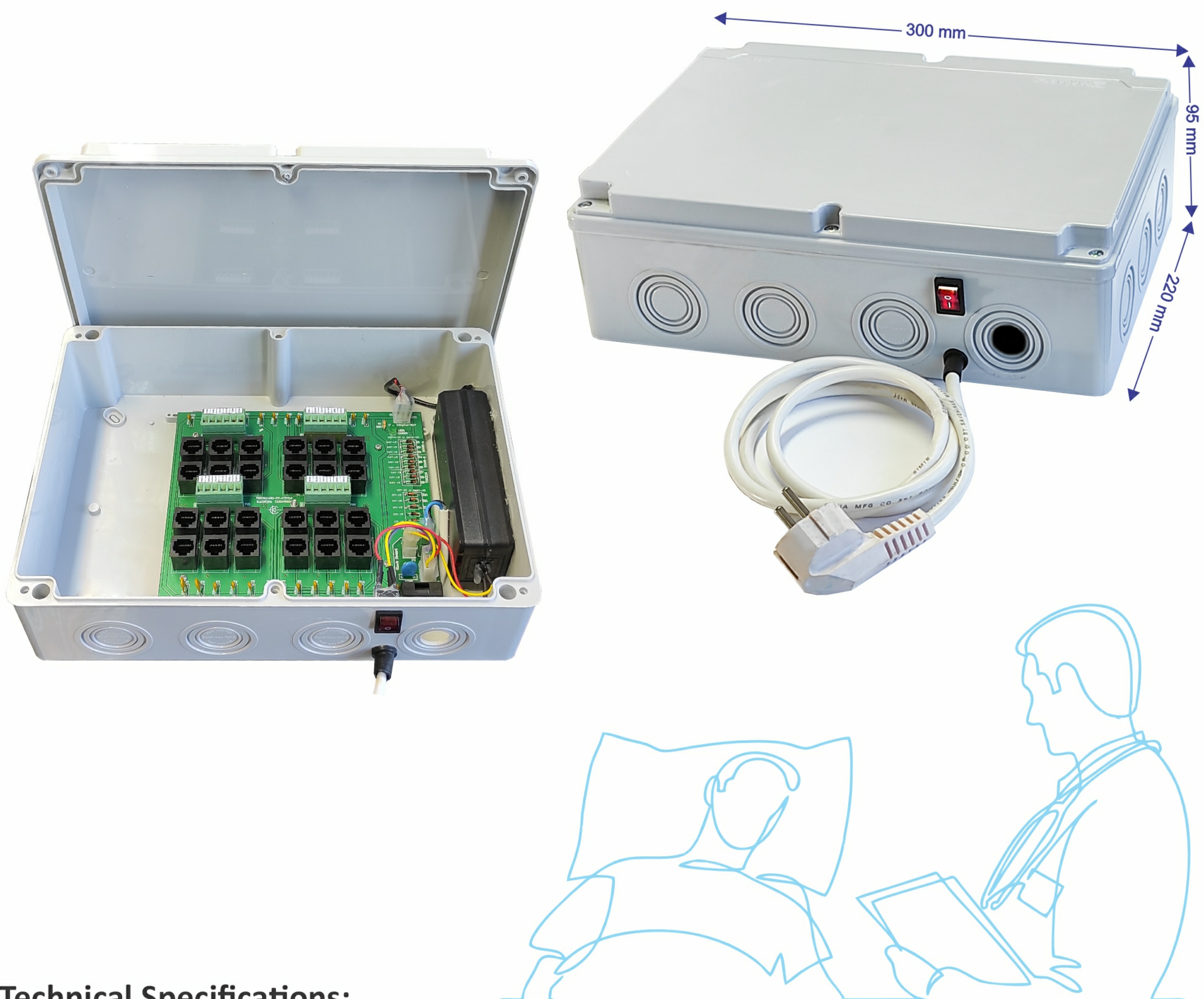

Technical Specifications:

Weight	827 g
Dimensions	W: 280 mm H: 48 mm D: 160 mm
Raw Material	Polycarbonate-ABS
Power Supply	24 VDC
Color	White
Port1	RJ45 Connector to Terminal Box (TBX-31)
Port2	RJ45 to Hospital Network
LCD Type	7-inch Touch , TFT
Speaker	8 Ohms , 0.5 Watt
Operating Temperature	-10°C ~ +50°C
Operating Humidity	30% ~ 80% RH
Mounting	Desk / Surface

SMART NCS – TERMINAL BOX (TBX-31)

TBX-31 is the interface between Patients' Intercom Panels (BCU-34/BCU-34N) via RJ45 and Phoenix ports and the staff console (CUI-32) via RJ45 port under RS-485 communication protocol.
TBX-31 provides the 24VDC power for the staff console.
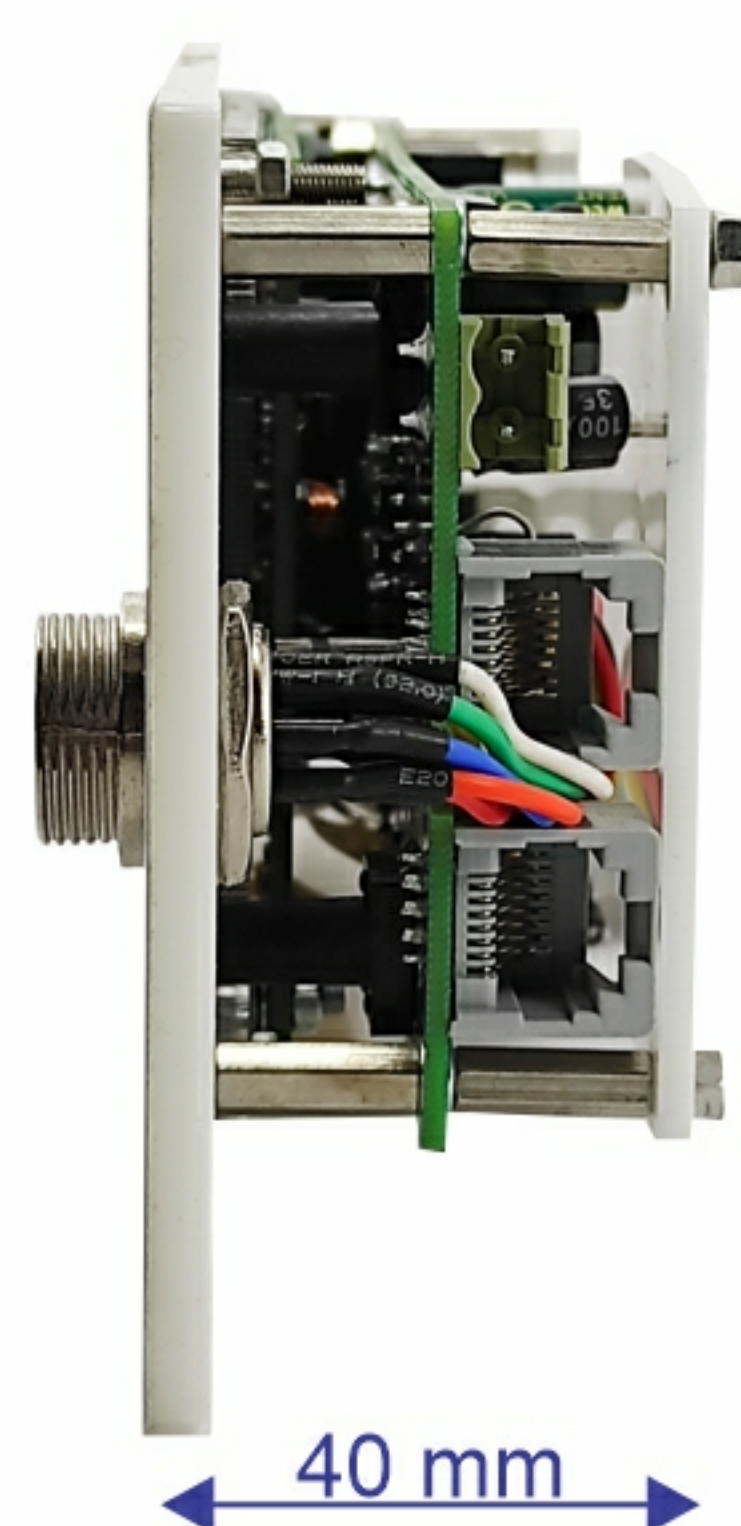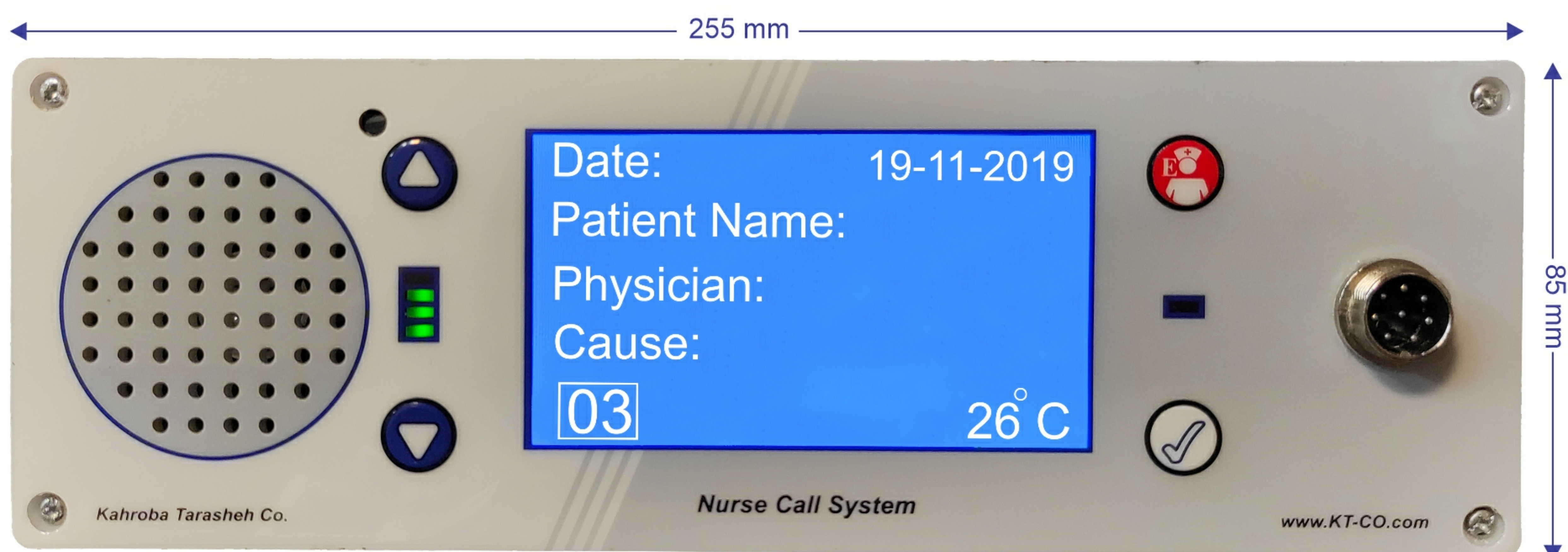

Technical Specifications:

Weight	1726 g
Dimensions	W: 300 mm H:95 mm D: 220 mm
Raw Material	ABS
Power Supply	220 ~ 240 VAC , 0.2 A (50 HZ)
Output Power	240 W (24 VDC)
Color	Grey
Port1	24 x RJ45
Port2	4 x 6-pin Phoenix
Operating Temperature	-10°C ~ +50°C
Operating Humidity	30% ~ 80% RH
Mounting	Surface (Max. 3 meters from Staff Console)

SMART NCS-PATIENT'S INTERCOM PANEL (BCU-34N)

BCU-34N is the bedside Patient's panel with a speaker to enable 2-way full-doplex communication between the patient and the management staff using the microphone on the pear push switch or handset (NCB-33/35). It has 2 buttons to adjust the volume of the speaker. It is equipped with an 8-pin military connector to ensure constant connectivity of the panel to Patient's Handset / Pear push Button (NCB-33/35) despite probable jolts.

BCU-34N also has a Nurse Call and a Cancel/Presence Switch and can initiate 5 different emergency code calls by holding any of the 2 volume rocker buttons and then pressing any of the other 3 remaining buttons (other volume rocker button or cancel button or emergency call button).

BCU-34N comes with a 4.3-inch display to monitor the Patient particulars from Hospital Information System (HIS) through Staff Console (CUI-32).The display shows date, room temperature ,bed number, physician name and the cause for hospitalization.
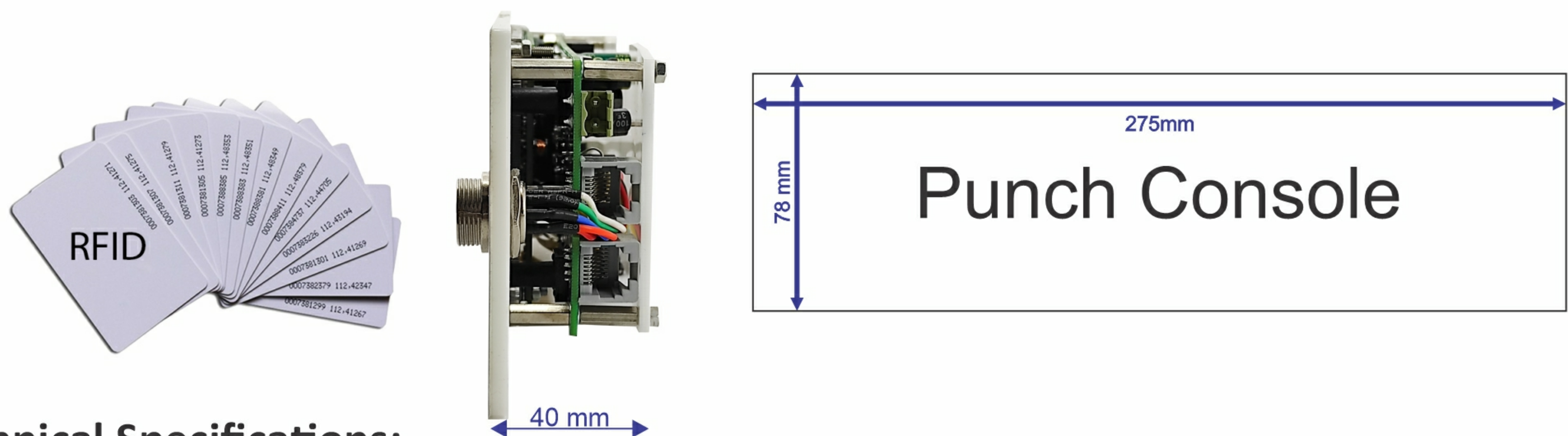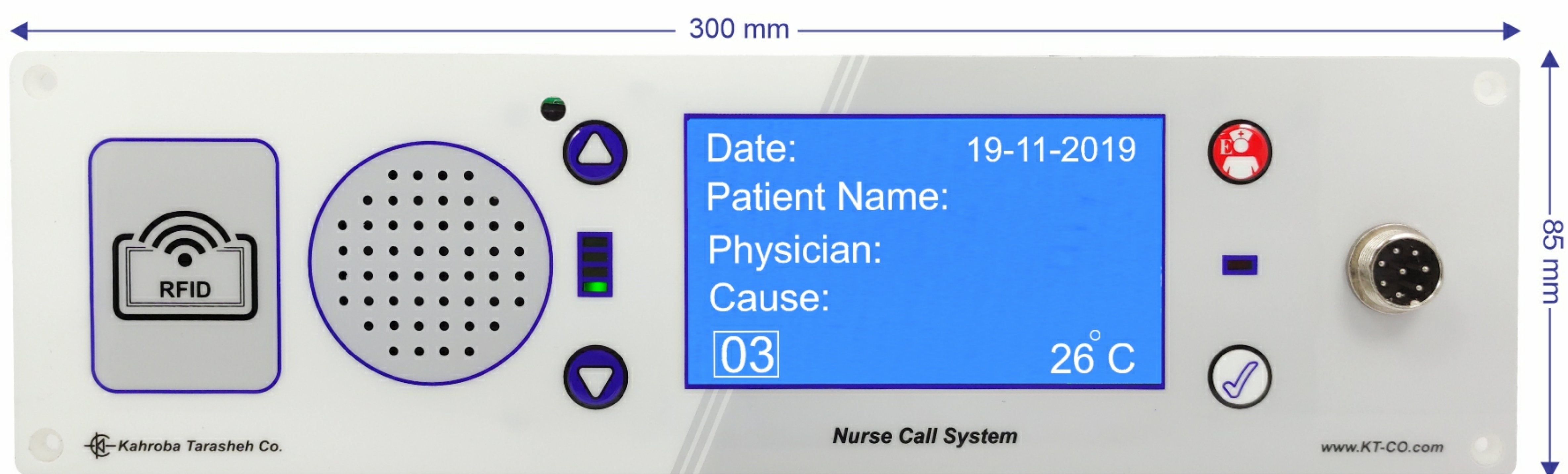

Technical Specifications:

Weight	377 g
Dimensions	W:2 5 mm H: 85 mm D:40 mm
Raw Material	Polycarbonate, Plexiglass
Power Supply	12 V DC (via an external Power Adaptor)
Color	White
Port1	RJ45 Connector to Layout Ring Wiring
Port2	8-pin, Military male connector to Patient's Handset
LCD Type, Size	TFT, 4.3"
Speaker	8 ohms, 0.5 Watt
Operating Temperature	-10 ° C ~ +50° C
Operating Humidity	30% ~ 80% RH
Mounting	Flush (Cavity Dimension: 235 mm x 78 mm x 100 mm)

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SMART NCS-PATIENT'S INTERCOM PANEL+ RFID (BCU-34)

BCU-34 is the bedside Patient's panel with a speaker to enable 2-way full-doplex communication between the patient and the management staff using the microphone on the pear push switch or handset (NCB-33/35). It has 2 buttons to adjust the volume of the speaker. It is equipped with an 8-pin military connector to ensure constant connectivity of the panel to Patient's Handset / Pear push Button (NCB-33/35) despite probable jolts.

BCU-34 also has a Nurse Call and a Cancel/Presence Switch and can initiate 5 different emergency code calls by holding any of the 2 volume rocker buttons and then pressing any of the other 3 remaining buttons (other volume rocker button or cancel button or emergency call button).

BCU-34 is equipped with an RFID card/tag to be used as the Nurse Presence indicator and comes with a 4.3-inch display to monitor the Patient particulars from Hospital Information System (HIS) through Staff Console (CUI-32).The display shows date, room temperature ,bed number, physician name and the cause for hospitalization.

Technical Specifications:

Weight	400 g
Dimensions	W: 300 mm H: 85 mm D:40 mm
Raw Material	Polycarbonate, Plexiglass
Power Supply	12 V DC (via an external Power Adaptor)
Color	White
Port1	RJ45 Connector to Layout Ring Wiring
Port2	8-pin, Military male connector to Patient's Handset
RFID Reader/Tag	Range: 1 ~ 4 cm, Frequency: 125 KHz, Data: 40-bit ID
LCD Type, Size	TFT, 4.3"
Speaker	8 ohms, 0.5 Watt
Operating Temperature	-10 ° C ~ +50° C
Operating Humidity	30% ~ 80% RH
Mounting	Flush (Cavity Dimension:275mm x 78 mm x 100 mm)

SMART NCS-PATIENTS' HANDSET (NCB-35)

NCB-35 is the advanced patients' handset with a Nurse Call switch attached to the patient's intercom panel (BCU-34/BCU-34N) via a coiled cord secured by an 8-pin military socket preventing detachment from the panel by any jolt.

NCB-35 also has a microphone for a 2-way full-duplex communication to the staff console (CUI-32) in combination with the speaker in the patient's panel (BCU-34/BCU-34N). It also acts as a pillow speaker for FM radio and a keypad for T.V/Radio control. It comes with a 5mm headphone jack and has a switch to turn on/off the reading light in the Patient's console.

Technical Specifications:

Weight	245 g
Dimensions	W: 55 mm H: 200 mm D: 23mm
Raw Material	Body: Polycarbonate +ABS Coiled Cable: PUR
Color	White
Connection	8-pin Gx16 (Female)
Port1	Headphones 5mm Jack
Speaker	0.5 W / 8 Ohm
Keypad	Keypad
Cable Length	4 m
Remote T.V./Radio Control	Yes
Operating Temperature	-10°C ~ +50°C
Operating Humidity	30-% ~ 80% RH
Mounting	Tabular at the bedside/Wall

SMART NCS- PEAR PUSH SWITCH(NCB-32)

NCB-32 is the pear push nurse call switch connecting to the patient's intercom panel (BCU-34/BCU-34N) via a coiled cord secured by an 8-pin military socket preventing detachment from the panel by any jolt.

NCB-32 also has a microphone for a 2-way full-duplex communication to the staff console (CUI-32) in combination with the speaker in the patient's panel (BCU-34/BCU-34N).

NCB-32 has a switch to turn on/off the reading light in the Patient's console.

Technical Specifications:

Weight	150 g
Dimensions	W:40 mm H:100 mm D: 28 mm
Raw Material	Body: Polycarbonate +ABS Coiled Cable: PUR
Power Supply	5 VDC
Color	White
Connection	8-Pin Gx16 (Female)
Cable Length	4 m
Operating Temperature	-10°C ~ +50°C
Operating Humidity	30-% ~ 80% RH
Mounting	Tabular at the bedside/Wall

SMART NCS- PEAR PUSH SWITCH(NCB-33)

NCB-33 is the pear push nurse call switch connecting to the patient's intercom panel (BCU-34/BCU-34N) via a coiled cord secured by an 8-pin military socket preventing detachment from the panel by any jolt.

NCB-33 also has a microphone for a 2-way full-duplex communication to the staff console (CUI-32) in combination with the speaker in the patient's panel (BCU-34/BCU-34N).

NCB-33 has a switch to turn on/off the reading light in the Patient's console.

Technical Specifications:

Weight	150 g
Dimensions	W:40 mm H:100 mm D: 28 mm
Raw Material	Body: Polycarbonate +ABS Coiled Cable: PUR
Power Supply	5 VDC
Color	White
Connection	8-Pin Gx16 (Female)
Cable Length	4 m
Operating Temperature	-10°C ~ +50°C
Operating Humidity	30-% ~ 80% RH
Mounting	Tabular at the bedside/Wall

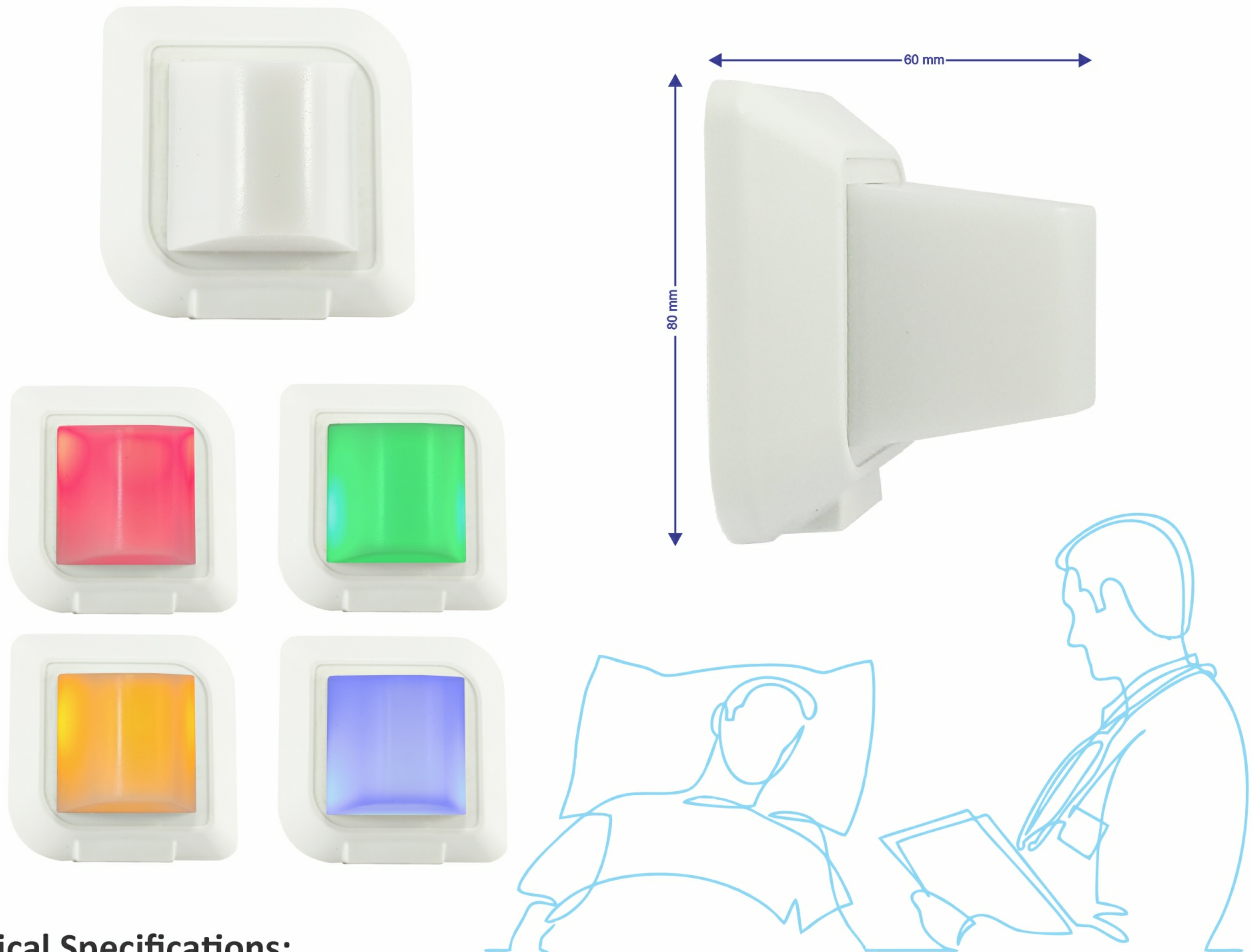## SMART NCS- CORRIDOR STATUS LIGHT (ODL-34/35/36)

ODL-34 is a wedge-shape corridor light noticeable from 5 angles which is installed above the patients' room door in the corridor.

ODL-34 has 4 different LED Light colors that will illuminate showing the following states:

- 🟢 Green Color (Steady): Normal Nurse Call status.
- 🔴 Red Color (Blinking): Emergency/Critical Nurse Call Status.
- 🟡 Yellow Color (Steady): Nurse Present status.
- 🔵 Blue color (Blinking): Code Blue-CPR status.

The light is OFF when no Call has been activated.

It is also possible to set the colors for the 4 states customized through either flexible (changeable by the customer) 12-Bit switches (ODL-35) or fixed (one-time set by the technician) 12-Bit H.W integrated jumpers (ODL-36) , each rendering 4'000 colors.
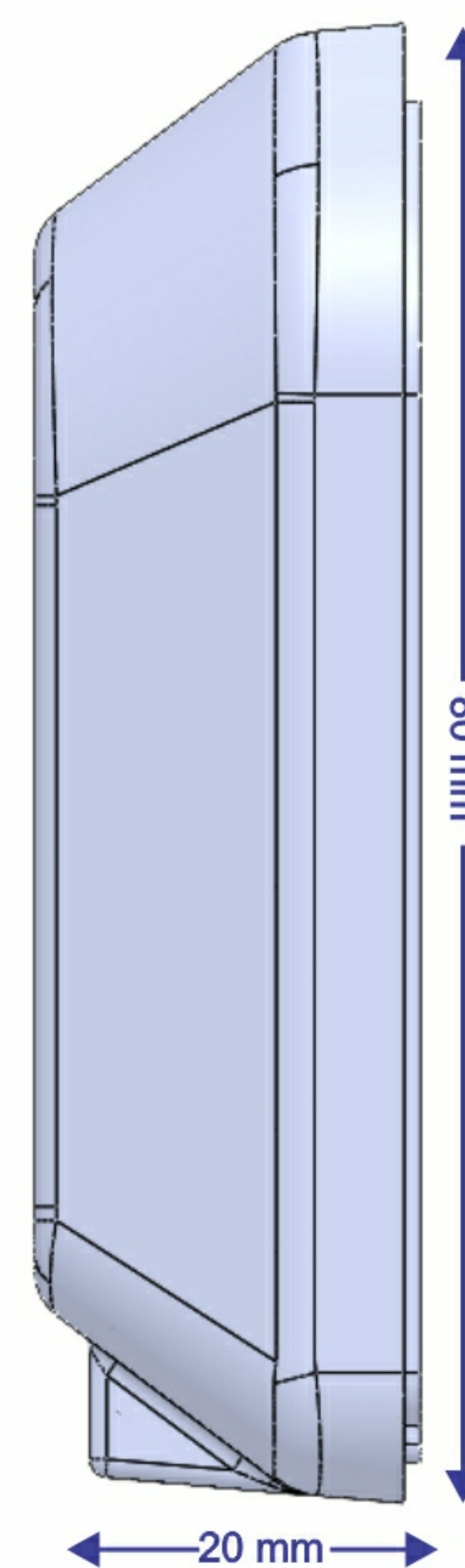

Technical Specifications:

Weight	75g		
Dimensions	W: 80 mm	H:80 mm	D: 60 mm
Raw Material	ABS		
Color	White		
Power Supply	5 V		
Light Type	LED		
LED Colors	Green /Red /Yellow /Blue		
Operating Temperature	-10°C ~ +50°C		
Operating Humidity	30-% ~ 80% RH		
Mounting	Flush/Surface		

SMART NCS-PULL CORD SWITCH (TB-31)

TB-31 is used in patient's bathroom, shower or similar areas making the call easier by pulling the cord. It activates a Service call in the staff console which has a higher priority than normal /emergency nurse calls.

TB-31 comes with a Cancel/Presence switch on the panel and has ingress protection rating (IP) against liquids up to IPX5.

Technical Specifications:

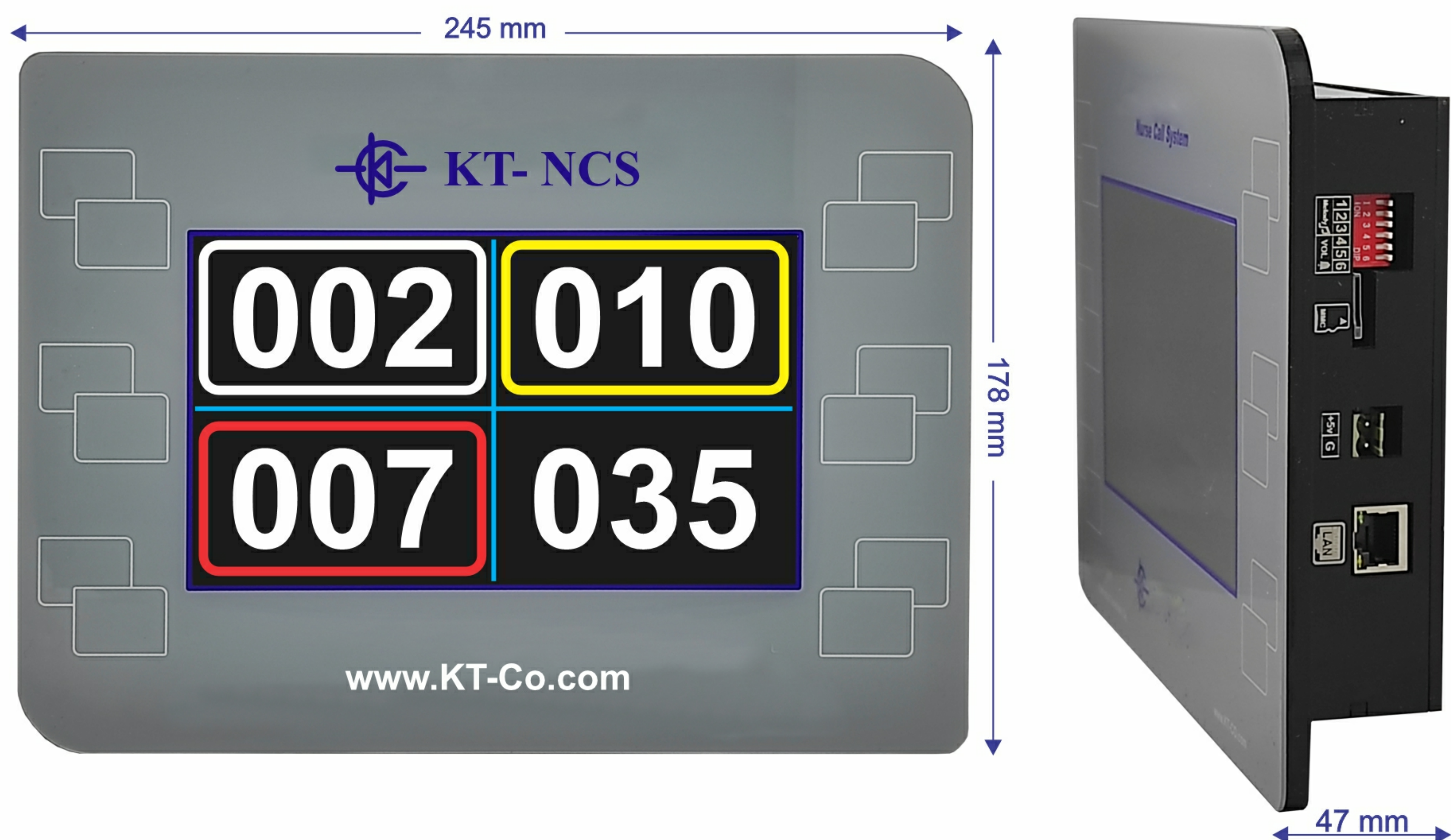| Weight	58g		
Dimensions	W: 80 mm	H: 80 mm	D:20 mm
Raw Material:	Polycarbonate + ABS		
Color	White		
Power Supply	12 V		
Cord Capacity	Max 20 Kg		
Operating Temperature	-10°C ~ +50°C		
Operating Humidity	30-% ~ 80% RH		
Mounting	Surface/Flush		

SMART NCS-STAFF DISPLAY UNIT (NDP-31)

NDP31 is the display unit installed in the management center. It is used to display the four highest priority calls from top left to bottom right of the display. The same priority calls are displayed in chronological order.

The highest priority is for critical beds with colored border. The second highest is for service calls with colored border.The third highest is for bed emergency calls with colored border.

The lowest is for bed normal calls with no border. The colors of the borders is customizable.

The Alarm for a new call is played by an internal speaker with melodies stored on a local Micro-SD card.
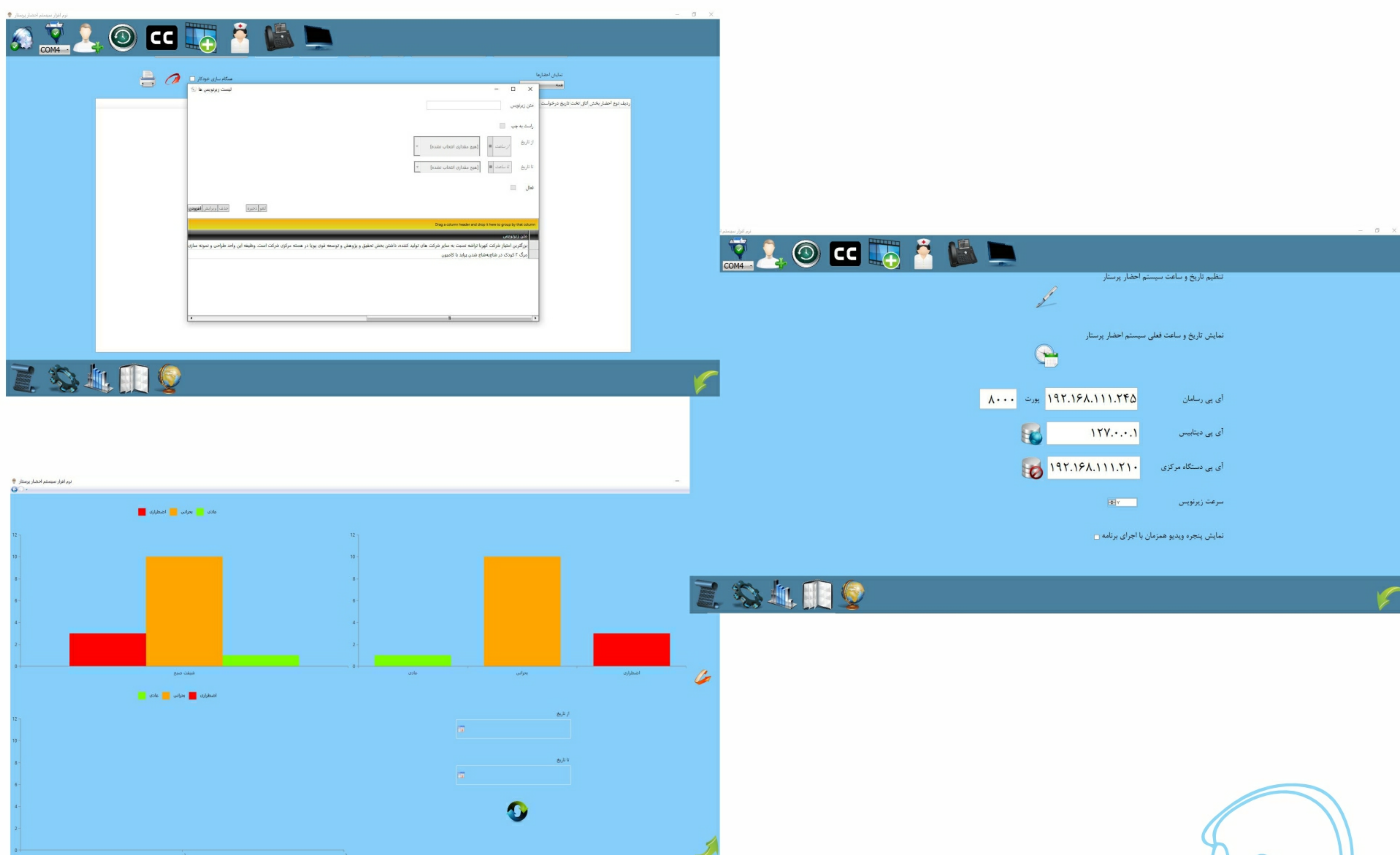

Technical Specifications:

Weight	918 g
Dimensions	W: 245 mm H: 178 mm D: 47 mm
Raw Material	Plexiglass + Plexiprint
Color	White
Power Supply	5 V via external AC adapter
Display Type	7-inch TFT
Internal Speaker	2 W, 8 Ohms
Port	RJ45 via Crossed Cable
Operating Temperature	-10°C ~ +50° C
Operating Humidity	30% ~ 80% RH
Mounting	Surface

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SMART NCS- MANAGEMENT REPORTING S.W.(CUS)

CUS is the management software connecting one or several staff consoles to the management report displaying unit through hospital LAN.

It can Record, Monitor and Analyze Call types, Staff Performance, Call Response Delay and Call Breaches in any given time period. The reports can be in PDF format or column charts. It also provides the means to associate the RFID tags to the staff for reporting purposes.

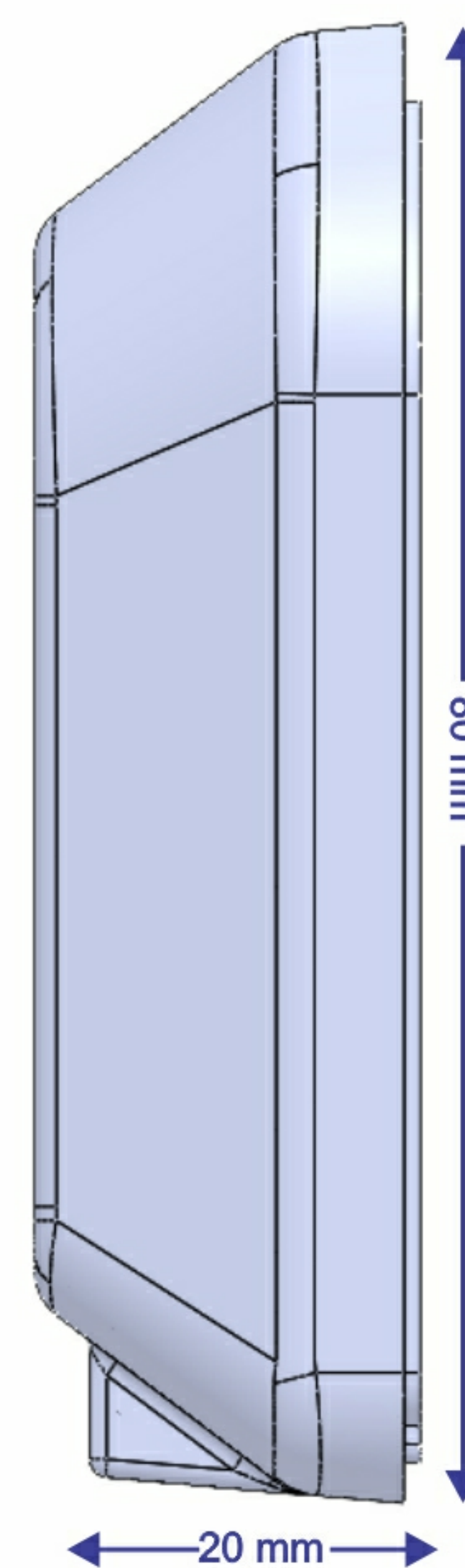The mangers can sort/ filter the call reports by their priority level.

Technical Specifications:

Required Operating System	Windows 10/Server
Required H.D.D.	Min.120 GB
Required RAM	Min 4G
Required Hardware	Ethernet Port
Required Processor	Min Core i3 or equivalent
Centralized Database	MS SQL

SMART NCS-Cancel/Presence Switch (CB-31)

CB-31 is a Cancel/Presence switch usually installed by the door of the patients' room. It can cancel any Normal/ Emergency /service or Critical Nurse Call activated from the room.
The nurse will use CB-31 after a call has been taken care of and there is no more activated call associated with the room.
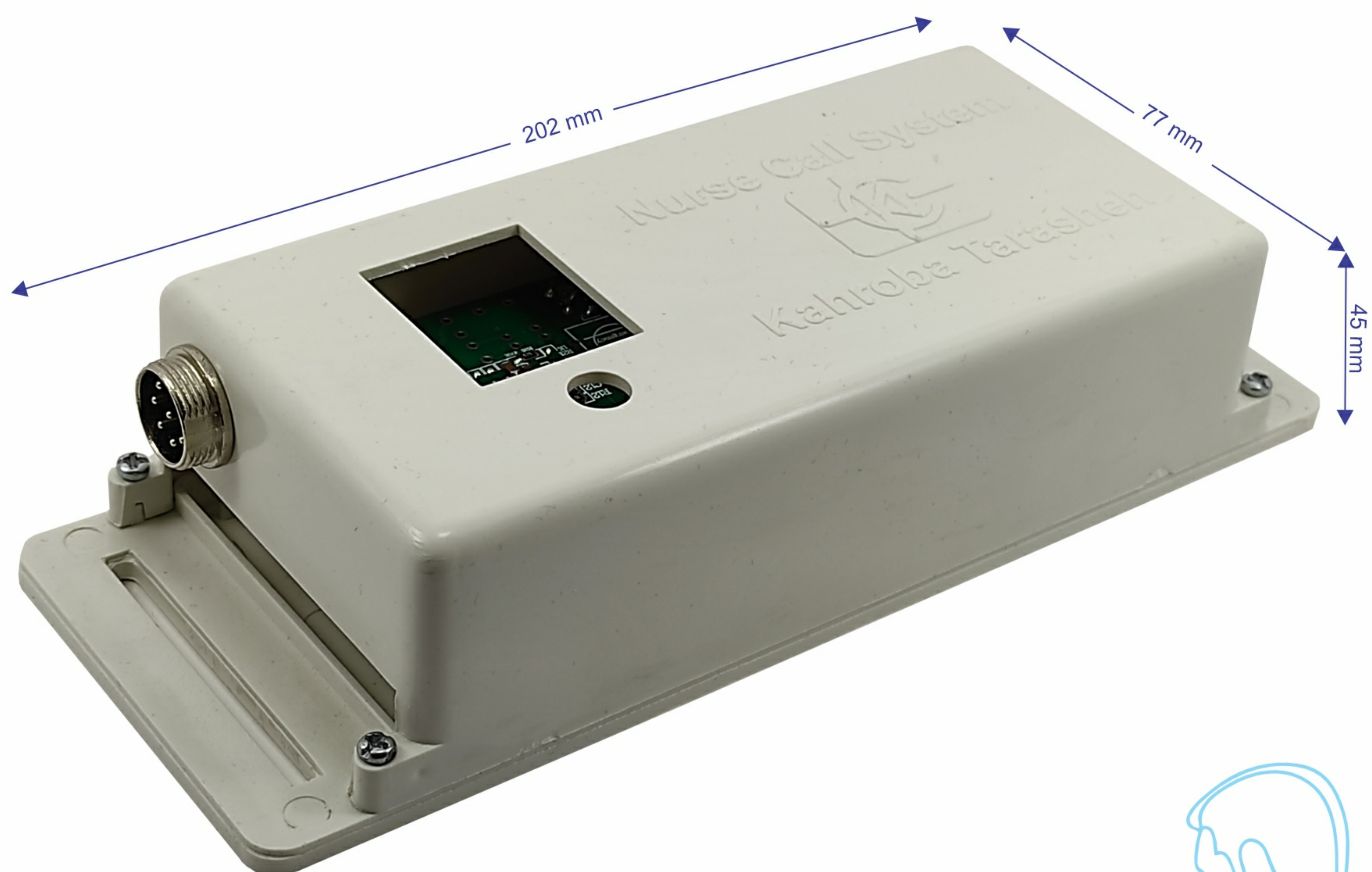
80 mm

20 mm

Technical Specifications:

Weight	58 g		
Dimensions	W: 80 mm	H: 80 mm	D: 20 mm
Raw Material	Polycarbonate + ABS		
Color	White		
Power Supply	12 V		
Operating Temperature	-10°C ~ +50° C		
Operating Humidity	30% ~ 80% RH		
Mounting	Surface/Flush		

SMART NCS – External Washroom Control Board (BCU-31-S)

The external washrooms in the ward needs an external control panel to connect them as a separate node in the Nurse call System configuration.

Each external washroom needs one BCU-31-S module and a Cat5/6 cable connects it to the terminal box under RS485 protocol.

202 mm

77 mm

45 mm

Technical Specifications:

Weight	161 g
Dimensions	W:202 mm H: 77 mm D: 45 mm
Raw Material	ABS
Color	White
Power Supply	12 V DC (Via the Cat5/6 cable from the Terminal Box)
Port1	RJ45 to Terminal box
Port 2	RJ45 (To Pull cord switch , Cancel switch and Corridor Light)
Operating Temperature	-10°C ~ +50° C
Operating Humidity	30% ~ 80% RH
Mounting	Surface