

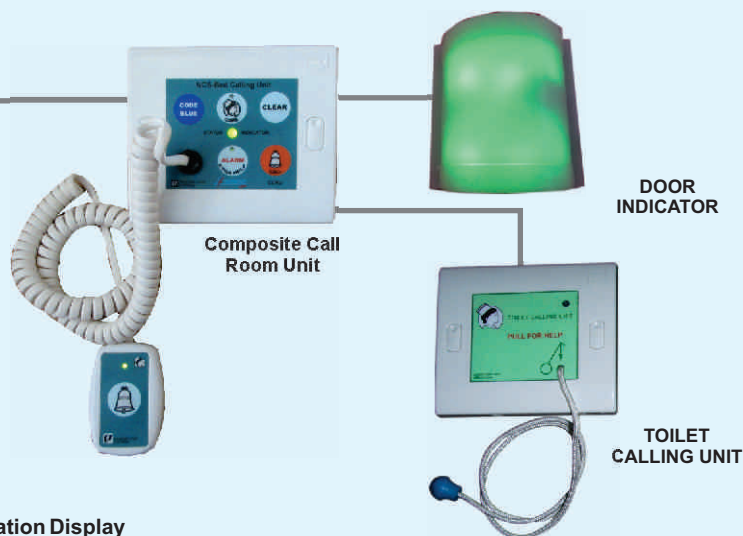


# Nurse Call System

## Enterprise\_xs



Nurse Station Display



There is an increased demand for better quality of service by the patients apart from the basic requirement of ensuring a positive response from the Nurse station (NS) when called by a patient. Hence "PROCESS CARE" has designed "Enterprise" model of Nurse Call System to provide for **Enhanced features** to meet the growing demands in Health Care. This model also provides for computer connectivity to enable generation of management information reports.

### BASIC FEATURES:

- ↳ Micro controller based design to minimize no. of cables and switches.
- ↳ Uses LCD based display with dynamic windows which displays the room number of the calling patient.
- ↳ Inbuilt voice module makes it distinguished.
- ↳ Low working voltage to ensure patient's safety.
- ↳ Any patient call is registered and remembered until the patient is attended to.
- ↳ Aesthetically designed dual colour Door Indicators help identify rooms with call pending or with nurse presence.

### ENHANCED FEATURES:

- ↳ **Call forwarding** during lean hours when limited staff is available.
- ↳ **Call Escalation** if pending for more than pre\_configured duration.
- ↳ Nurse presence indication included in the Dual Colored Door Indicator to show "Patient under Care" status
- ↳ Various **Call Status** indications through multicolor LED on the calling unit.
- ↳ Provision for indicating **Code Blue Alerts**.
- ↳ Every Room Number indicator is appended with dynamically varying call description at the Nurse Station.
- ↳ Provision for **Emergency call** with protection against inadvertent initiation and with differentiation between nurse and patient initiated emergency.
- ↳ Nurse Station Display includes single line **text display** to show various messages viz.: Nurse presence in a room, call forwarded from another Nurse Station, Emergency Alarm etc.
- ↳ Allows for multiple Nurse Station Displays for duplication of information in the corridor etc.,
- ↳ Configurable Voice module in the NS Display to have persistent or intermittent behavior.
- ↳ Computer connectivity allows for various MIS reports like call density, Average response time, record of escalated calls, calls profile etc.,
- ↳ Configurable System to suit variety of hospital requirements.
- ↳ Optional Equipment Alarm interface module allows for conveying **Medical Equipment Alarms** to the Nurse Station automatically.

## The System comprises of the following modules :

### Bed Calling Unit :

The Bed Calling Unit is designed around a RISC based micro-controller to monitor all the room modules viz: TCU, DI, Optional Equipment Alarm Interface etc., and to report their status to the Nurse Station Controller.

#### Features:

- ★ Houses 5 feather touch keys viz: CALL, CARE, CLEAR for closing the call, CODE BLUE & XTRAHELP for Emergency.
- ★ Gets integrated with the Palm switch for initiating a call from the bed itself.
- ★ Makes use of one multicolor LED for indicating Call Status and two more LEDs for Nurse presence and Alarm indication.
- ★ **Different versions are available for shared room units.**

#### Specifications :

Gets powered by Nurse Station Controller, consumes less than 5 watts. Uses 4 pairs of wires to get inter-connected with Nurse Station controller.

#### Technical Specification :

**Dimension** : 102L X 87W X 49H mm

**Weight** : 0.35 Kg

**Material** : Plastic Enclosure

### Door Indicator (DI):

- ★ Houses multicolor of super bright LEDs.
- ★ Uses a semi circular plastic housing.
- ★ Needs less than 600mwatts.
- ★ Indicates various Call types & Status.
- ★ Used as a Bed indication to shared room unit.

### Toilet Unit (TCU) :

- ★ Houses a pull cord switch to trigger a Call.
- ★ Integrated LED indicator to show Call Status.

### Equipment Alarm Interface:

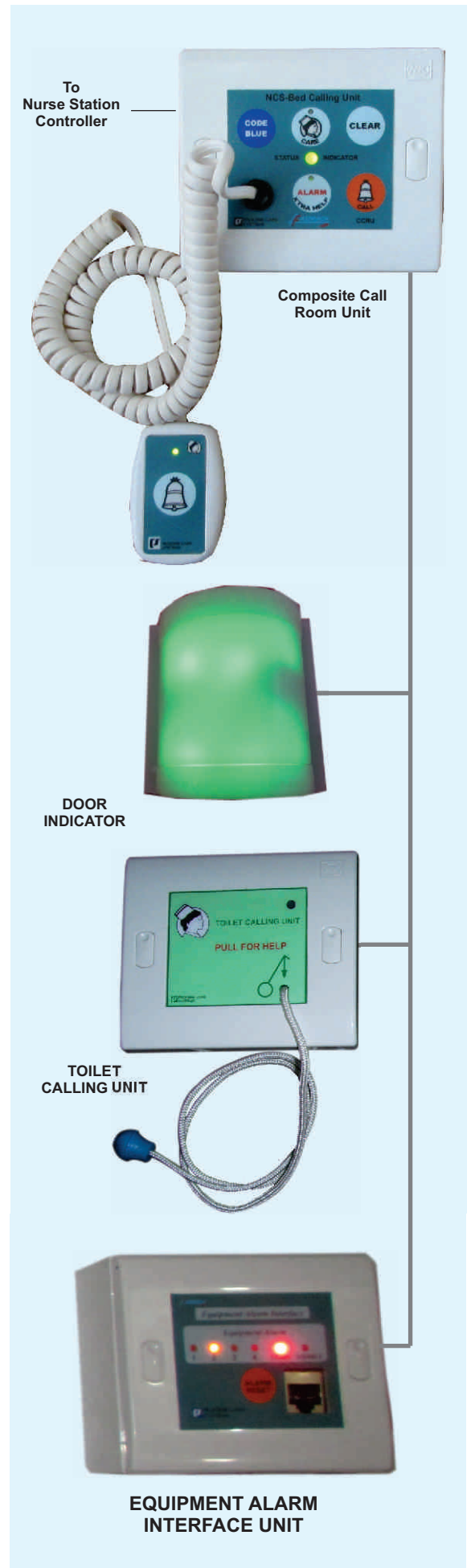
- ★ Can Interface with upto 4 medical equipments.
- ★ Can read potential free contact or open collector or any active alarm output of a medical equipment.
- ★ Integrated Alarm Reset key allows for Resetting an Alarm condition or permanently disabling all Alarm inputs.
- ★ Integrated Power Supply module to energize interface Electronics. Draws less than 1 watt power from 230VAC

#### Technical Specification :

**Dimension** : 102L X 87W X 49H mm

**Weight** : 0.35 Kg

**Material** : Plastic Enclosure



## Nurse Station Controller (NSC):

Designed around a high speed RISC based micro-controller to interface with 19 room units and a Nurse Station (NS) Display module. It collects information from all the enabled room units, sends indicator information to all the calling units and the door indicators. It processes all the calls and accordingly instructs Nurse Station (NS) Display module. It also sends status to the supervisory controller about all the activities.

### Specifications:

Allows for 19 Room units and a Nurse Station Display module.  
One composite port to interact with supervisory controller.

### Technical Specifications:

**Dimension** : 350 W X 65H X 180D mm  
**Power** : 230 V AC +/-10%, 50 Hz, 50 watts  
**Weight** : 2.5 Kg  
**Material** : Powder Coated MS Enclosure



## Medication Alarm Unit (MAU):

Medication Alarm Unit is designed to integrate all the functionalities of Single Room Unit in addition to having following special features:

- ★ In built programmable timer for monitoring patient alertness.
- ★ Allows for setting 40 alarms to trigger automatic Nurse calls for applications like Reminders for medicine administering.
- ★ Serves as Digital clock while idling.
- ★ The LCD is used to show various call status if any call is pending.

### Technical Specification :

**Dimension** : 143L X 87W X 49H mm  
**Weight** : 0.3 Kg  
**Material** : Plastic Enclosure



## Nurse Station LCD Display (NS LCD):

This is a Micro-controller based device placed in the Nurse Station with dynamic windows which displays the room number of the calling patient along with call description and also it has a voice module to announce the call.

### Specifications:

There are three buttons on it,

**POWER Button:** Pressing this for long time (approximately 3 sec) turns the device ON or OFF.

**MUTE Button:** It is for acknowledging a call from patient. It will make the flashing window steady and also silences the voice module until a call is cleared.

**Test Button:** On pressing the button it will flash all the windows and will announce "Attention, Patient calling" to make sure that the device is working fine.

### Technical Specifications:

Display windows:

**LCD display** : 320 X 240 pixels.  
**Dimension** : 255W X107H X 205D mm  
**Indicators** : Flashing 5mm LED to indicate NCS is active.  
**Power** : 230 V AC +/-10%, 50 Hz, 15 watts





## Supervisory Controller (SC):

The supervisory controller is also designed making use of a high speed **RISC** based Micro-controller to get connected to 16 Nurse Station controllers and to a PC. It interrogates all the Nurse Station Controllers to get information related to all the activities of different Room Units and process them to arrive at call forwarding, Call escalation information which are forwarded to a PC, to Supervisory display unit and to the Nurse Station Displays through Nurse Station controller. It also reports to the PC about all the other activities.

### Specifications:

*Allows for 16 Nurse Station (NS) Controllers' Interconnections.*

*An independent port to report to PC is included*

*Message Display port is used to show call escalation information etc.,*

### Technical Specifications:

<b>Dimension</b>	: 350 W X 65H X 180D mm
<b>Power</b>	: 230 V AC +/-10%, 50 Hz, 50 watts
<b>Weight</b>	: 2.5 Kg
<b>Material</b>	: Powder Coated MS Enclosure



## Nurse Call Analysing System - NCAS

A Computer with associated software loaded allows management to view various MIS reports like call density, Average response time, record of escalated calls, calls profile etc.,

Additional feature of sending SMS for Escalated calls is an option.

### Specifications:

*Pentium IV with minimum of 128MB RAM*

*One COM Port exclusively dedicated for serial communication with NCS\_NW devices and another COM port for GSM Modem.*

*CD\_ROM Drive*

*PC with Windows XP as operating system MS Office 2000 or later installed*



## HEALTH CARE COMMUNICATION PRODUCTS:

- ❖ Nurse Call System - *Enterprise, Esteem\_GSM, Esteem\_SLK*
- ❖ OPD-Q Management System
- ❖ Token Management System
- ❖ GPS based Smart Announcement Clock
- ❖ Hospital Information Display System
- ❖ Operation Theatre Parameter Display
- ❖ Code Blue Alert System

Visit our website [www.datacareindia.com](http://www.datacareindia.com) for entire product range

Head Office :



**PROCESS CARE  
SYSTEMS (INDIA) PVT. LTD.**

No. 12, 1st Floor, 2nd Block, KIADB Industrial Complex, Plot No. 488,  
14th Cross, 4th Phase, Peenya Industrial Area, BENGALURU - 560 058.

**Tel** : 91 80 4352 1111 / 97319 00027 **Fax** : 91 80 4352 1140

**E-mail**: [info@datacareindia.com](mailto:info@datacareindia.com) **Website**: [www.datacareindia.com](http://www.datacareindia.com)

### Contact Information for Branch Offices

Ahmedabad:	76007-93707	
Chandigarh :	78378-94792	
Chennai :	98400-79016	044-6499 0968
Cochin :	97441-04999	0484-653 1594
Delhi :	95605-09872	011-2223 4178
Hyderabad :	96426-32244	
Mumbai :	98202-17094	
Lucknow :	1800 103 3282	

**TOLL FREE No.:** 1800 103 3282

Doc. No. : PCS/CAT/NCS\_XS 1215