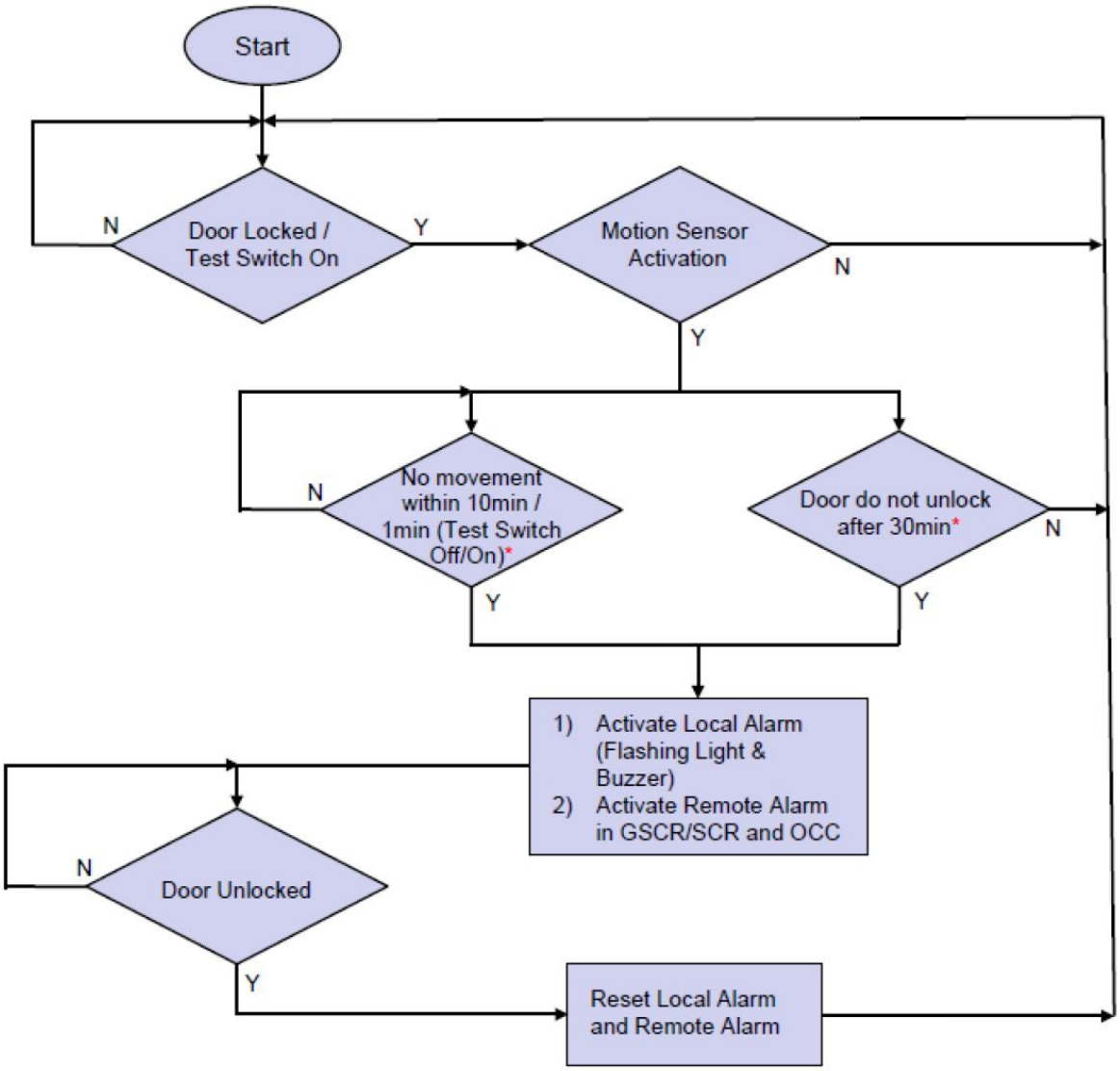
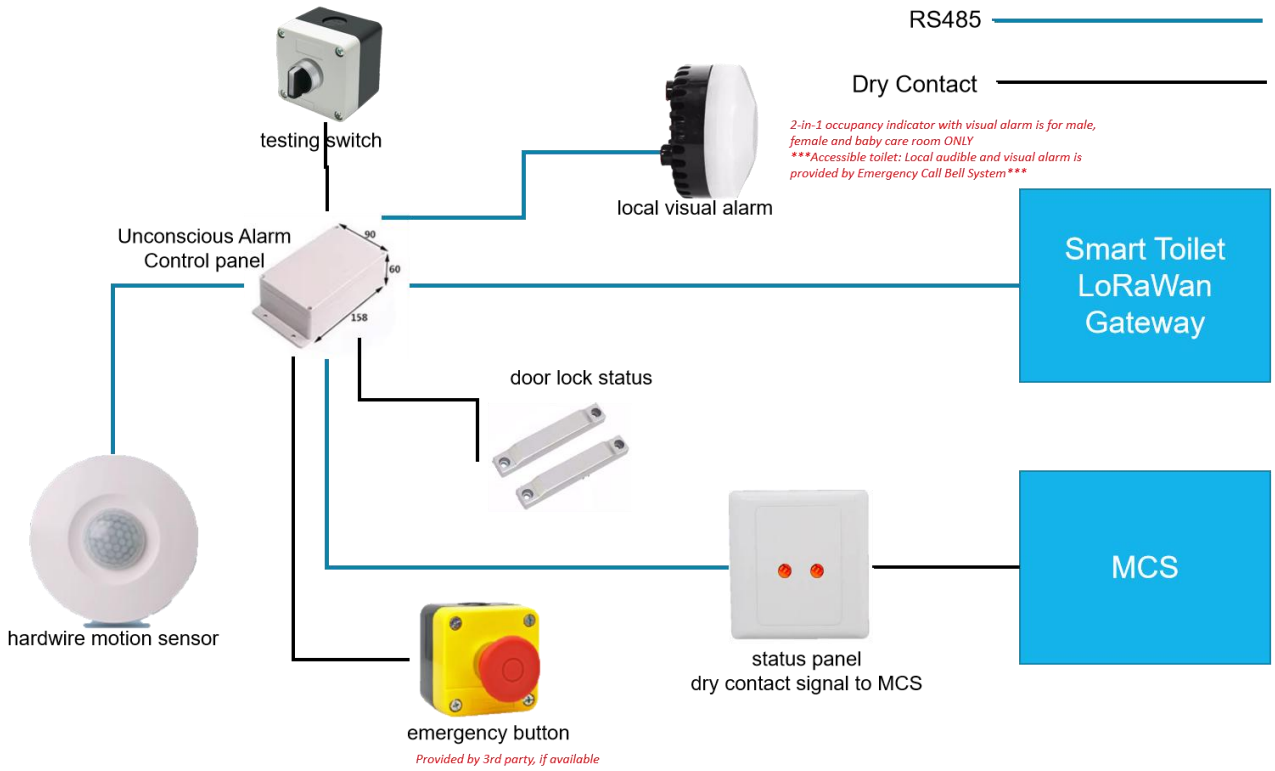
Unconscious System in Smart Toilet

This system is implemented to realize the following monitoring flow.



System Configuration



Equipment Specification - Emergency Button

Main

Range of product	Easy Harmony XB2
Product or component type	Complete emergency switching off push-button
Device short name	XB2
Device presentation	Complete product
Bezel material	Chromium plated metal
Fixing collar material	Zamak
Mounting diameter	22.5 mm
Head type	Mushroom
Sale per indivisible quantity	1

Complementary

Operating position	Any position
Device mounting	Fixing hole - diameter: 22.5 mm
Fixing center	>= 30 x 40 mm (1...6 mm thick panel) - thickness: 1…6 mm
Fixing mode	Fixing screw beneath head recommended torque: 0.8 N.m Fixing screw beneath head recommended torque: 1.0 N.m
Shape of signaling unit head	Round
Type of operator	push-pull
Reset	Push-pull
Operator profile	Red mushroom Ø 40 mm, unmarked
Terminals description ISO n°1	(11-12)NC
Cap/operator or lens colour	Red
Product compatibility	ZB2..C
Contacts type and composition	1 NC
Contact operation	Slow-break
Contacts usage	Standard contacts
Positive opening	With NC contact conforming to IEC 60947-5-1 appendix K
Operating travel	2.0 mm (NC changing electrical state) 4.15 mm (total travel)
Mechanical durability	300000 cycles

Connections - terminals	Screw clamp terminal, <= 2 x 1.5 mm² with and without cable ends Screw clamp terminal, <= 1 x 2.5 mm² with and without cable ends Screw clamp terminal, >= 1 x 0.5 mm² with and without cable ends Faston terminals, connection size: 6.3 mm
Tightening torque	0.8…1.0 N.m
Shape of screw head	Cross compatible with Philips no 1 screwdriver Cross compatible with pozidriv No 1 screwdriver Slotted compatible with flat Ø 4 mm screwdriver Slotted compatible with flat Ø 5.5 mm screwdriver
Contacts material	Silver alloy (Ag/Ni)
Short-circuit protection	10 A gL fuse type gG conforming to IEC 60947-5-1
[Ith] conventional free air thermal current	10 A conforming to IEC 60947-5-1
[Ui] rated insulation voltage	600 V (pollution degree 3) conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-1
[Ie] rated operational current	3 A at 240 V, AC-15, A600 conforming to IEC 60947-5-1 0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60974-5-1
Electrical durability	1000000 cycles, AC-15, 3 A at 240 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.27 A at 250 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to IEC 60947-5-1 appendix C
Electrical reliability	Λ < 10exp(-6) at 5 V, 1 mA in clean environment conforming to IEC 60947-5-4 Λ < 10exp(-8) at 17 V, 5 mA in clean environment conforming to IEC 60947-5-4
Height	40 mm
Width	40 mm
Depth	73.5 mm
Product weight	0.115 kg
Customizable	No
Type of operator	Mechanical latching

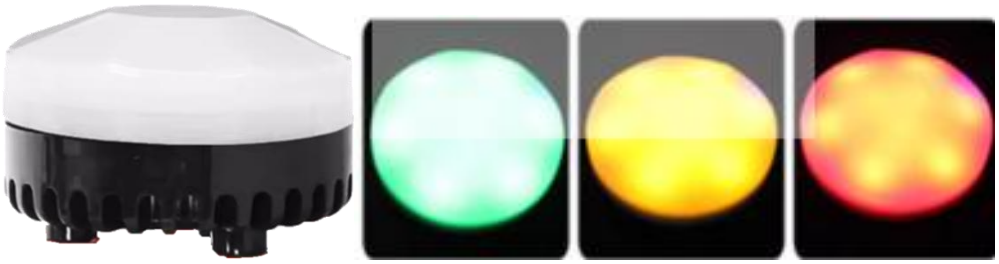
Environment

Protective treatment	TC/TH
Ambient air temperature for storage	-40…70 °C
Ambient air temperature for operation	-25…70 °C
Overvoltage category	Class I conforming to IEC 60536
Standards	IEC 60947-5-1 IEC 60947-5-4 IEC 60947-1 GB/T 14048.1 GB/T 14048.5
Product certifications	CE CCC
Marking	Unmarked
IP degree of protection	IP65
IK degree of protection	IK06
Vibration resistance	5 gn (f= 2…500 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27

Equipment Specification - Testing Switch

Parameter	Specification
Dimension	80 x 80 x 50 mm
Protection	IP65
Protocol	Dry Contact
Operation Condition	0℃ - 50℃

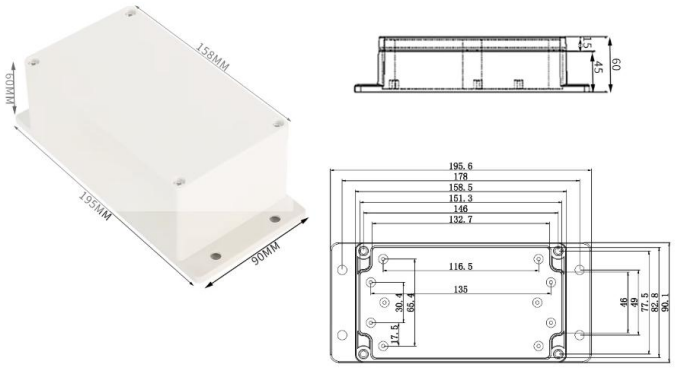
Equipment Specification - 2-in-1 Occupancy Indicator



Parameter	Specification
Dimension	Φ75 x 49 mm
Sound	3W sound, MP3
Visual	**RED (Alert)** / **YELLOW (Occupied)** / **GREEN (Available)** Rapid flash / Strobe / always on / off
Weight	110 g
Protection	IP65
Protocol	RS485
Operation Condition	0℃ - 50℃

Equipment Specification - Unconscious Alarm Control panel

The unconscious alarm Control Panel is the brain of the Unconscious System. It consists of a MCU where the logic of the Unconscious System is processed locally for fast response. It also synchronize the results and communicate to the gateway, such that the real time status can be sent to personnel needed.



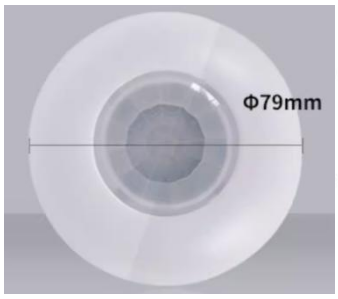
Parameter	Specification
Dimension	195 x 90 x 60 mm
Power	12V DC
Protection	IP65

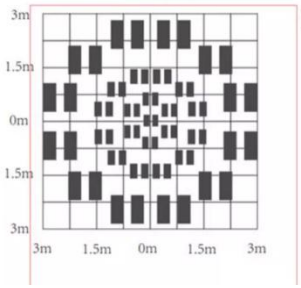
Equipment Specification - Doo Lock Status

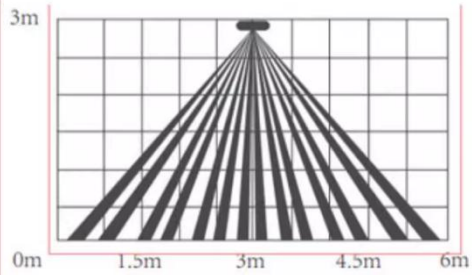
We provide door lock sensor with different sizes. Please refer to dimension and installation.

Parameter	Specification
Contact Signal	Normally Open (NO) / Normally Closed (NC)
Power Supply	Passive
Power (Used as Switch)	12 V
Load power	Normally Closed: 10 W Normally Open: 3 W
Maximum current	0.5 A
Operating Temperature	-30 to 60℃
Colour & Surface	Electroplating Grey
Weight	1g per piece

Equipment Specification - Hardwired Motion Sensor







Dimension	Refer to picture above
Voltage	12V DC
Detecton Dameter	6m (height = 3m)
Detection Angle	+/- 45°
Installation height	2 - 6 m
Protocol	RS485
Operation Condition	-10 - 50 ℃, < 95% RH non-condensing
Operation Current	< 20 mA

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Equipment Specification - Emergency Call Bell Panel

The Emegency Call Bell Panel is a 86 box with 2 LED indicator. Each of the LED represents the status of the dry contact signals to MCS. The LD will be labeled for deployment.

Installation

The Call Bell System is designed with easy screw mount on wall. Screw holes are designed with the housing in all components that could be wall-mounted.

Installation can be done only by the professional construction personnel or authorized engineering representative. Please use the professionally qualified installation tools to guarantee the safety of the construction personnel. Installation position must be far away from the fire source, strong electric field, magnetic field etc., otherwise damage will be resulted. ChinoINT reserves the interpretation of installation.

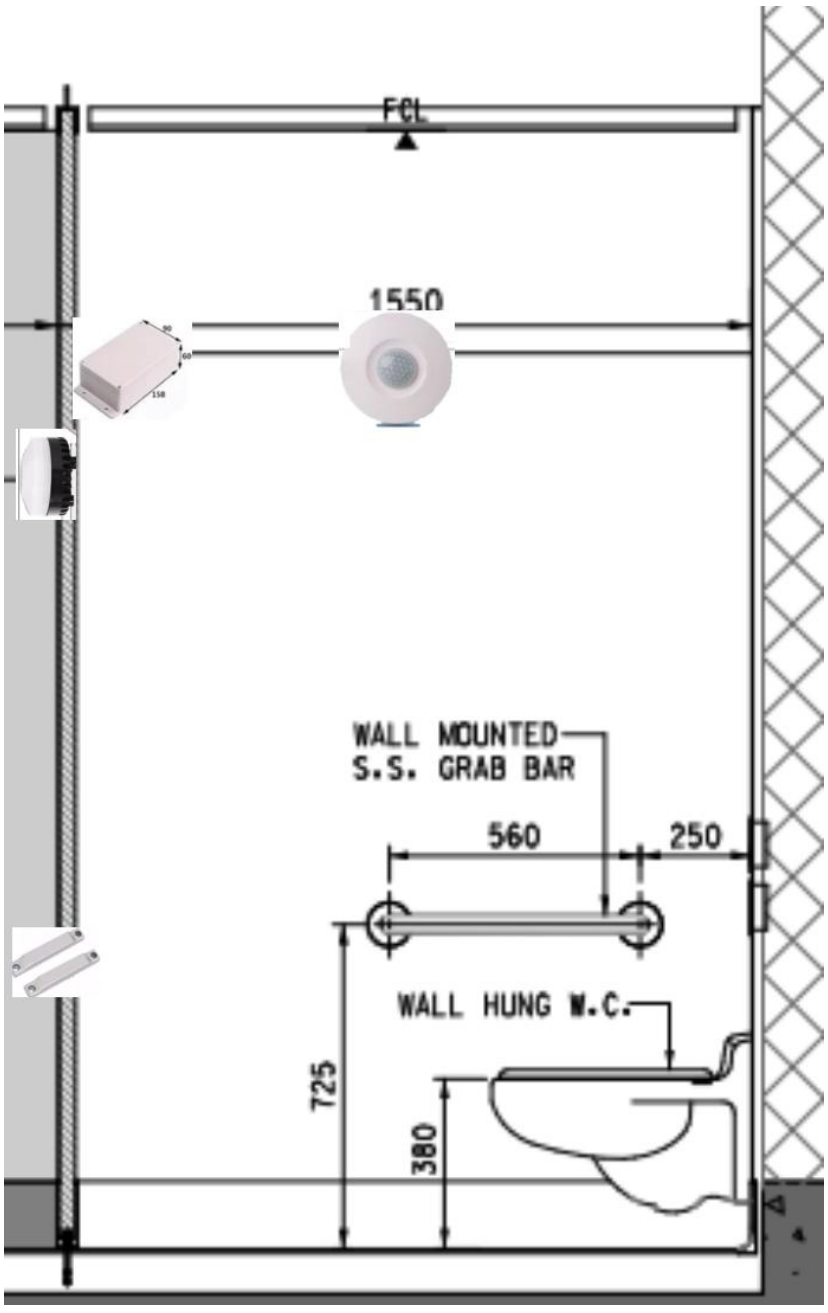
Common Layout

All final installation locations are subject to onsite situation, installation team and client. Listed below are for some common layouts. They are only for reference.

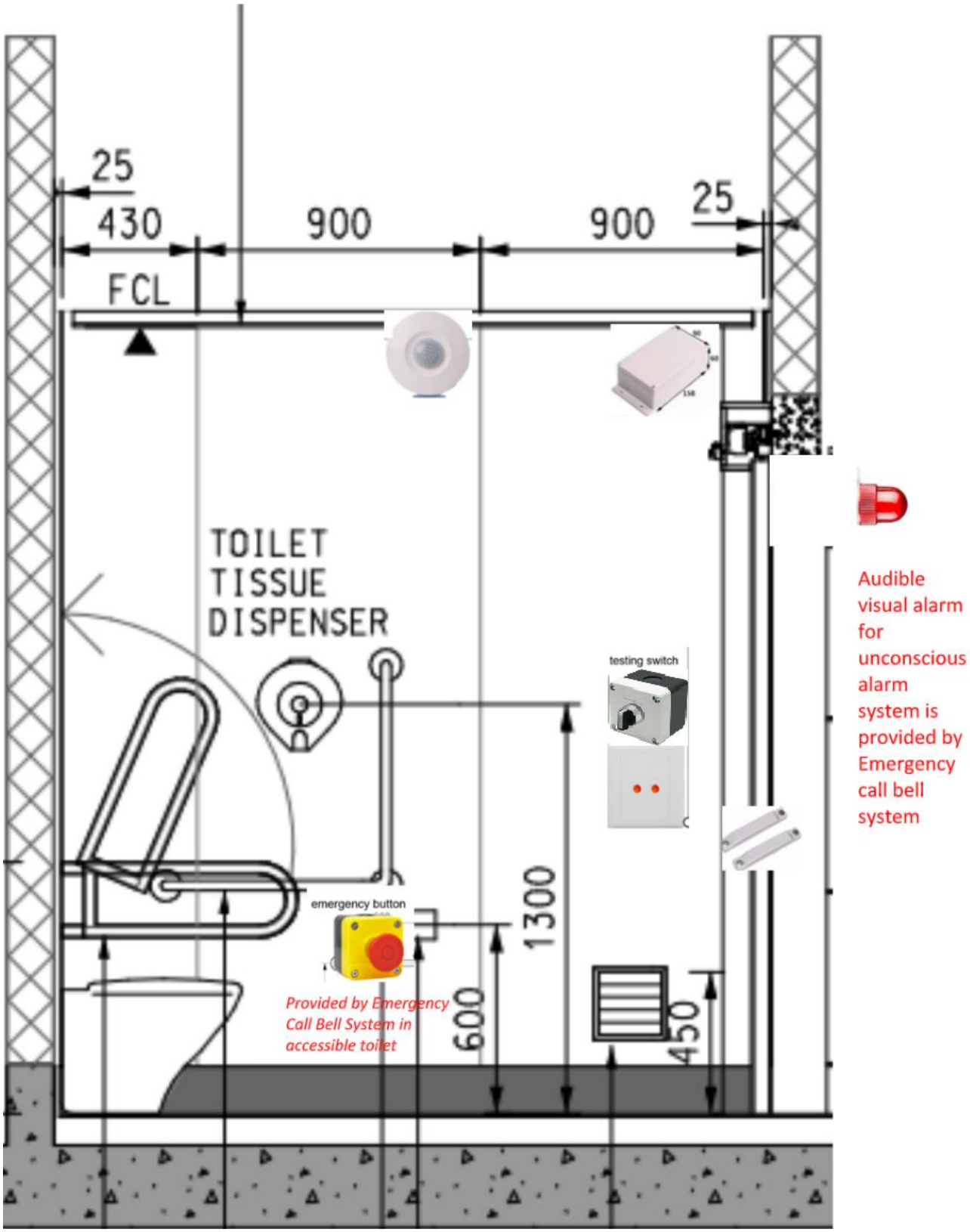
The Unconscious Alarm Control panel, Emergency Call Bell Panel and the testing switch are usually installed at location convenience to operator. This is subject to change with site requirements.

The 2-in-1 Occupancy Indicator Alarm is usually installed at entrance.

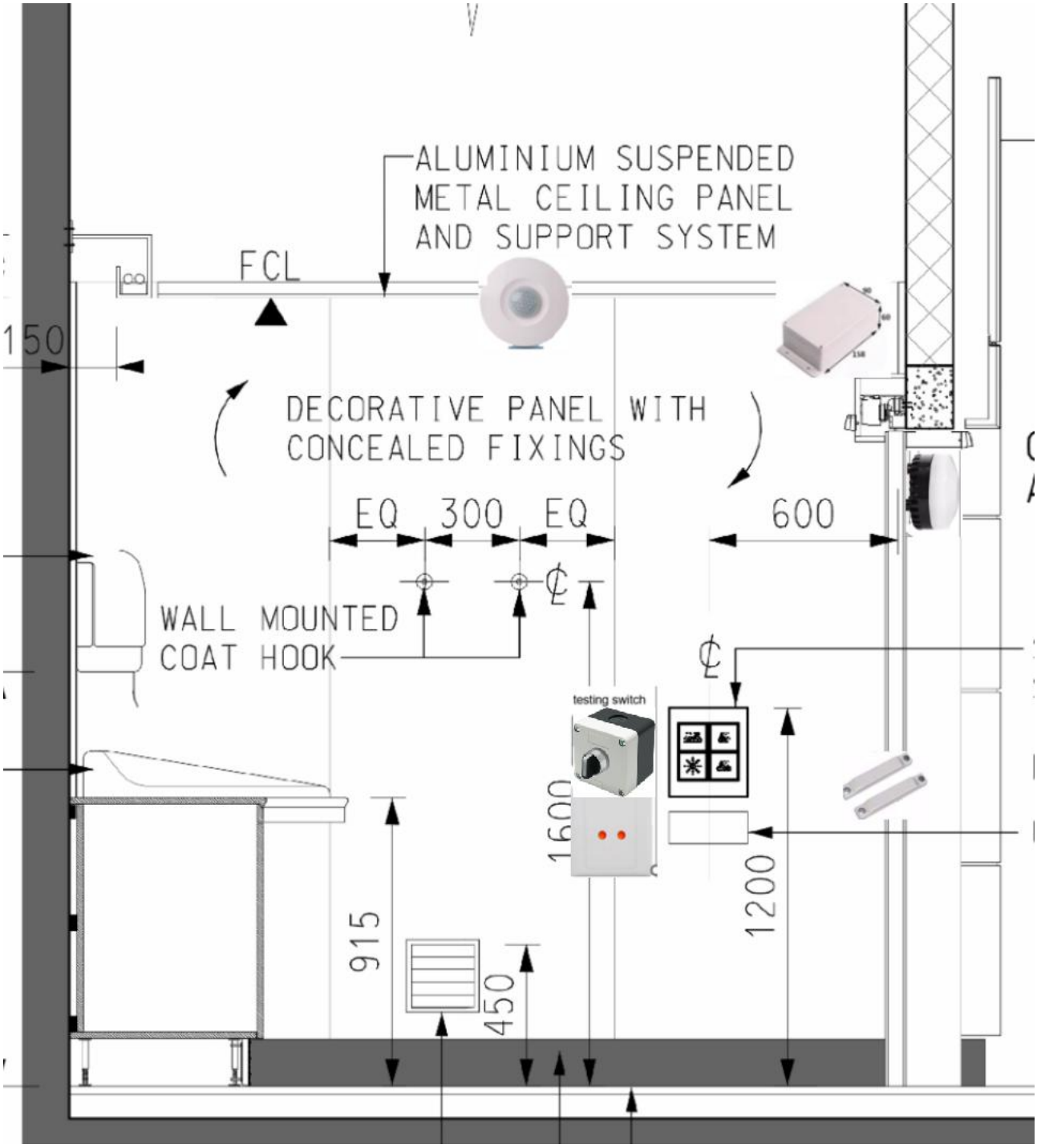
Male / Female Toilet Cubicle



Accessible Toilet

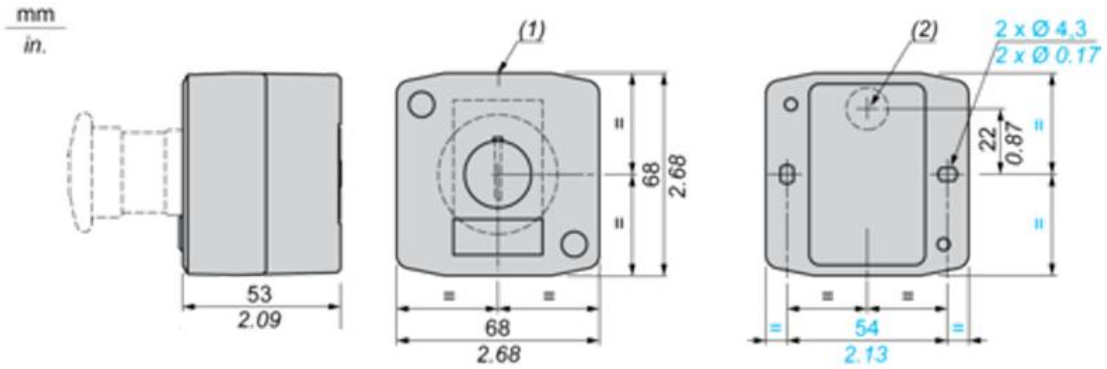


Baby Care Room



Testing Switch Installation

Shown below is the housing structure diagram. For wall-mount, follow the diagram to find the screw holes for mounting.



(1) 2 knock-outs for Pg 13.5 cable gland, maximum capacity 12 mm/0.47 in.

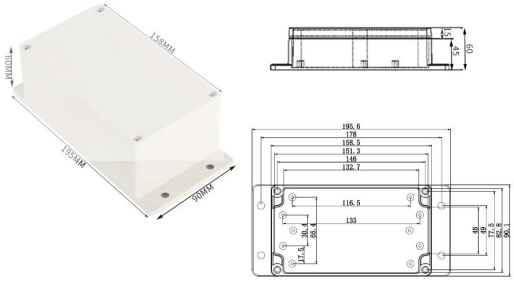
(2) Knock-out for cable entry, maximum capacity 14 mm/0.55 in.

2-in-1 Occupancy Indicator with visual alarm Installation

Shown below is the dimension and screw holes for the 2-in-1 Occupancy Indicator with 3 colours. This allows easy recognition of different status, such empty / occupied / help needed. Wall-mount screw holes can be found at the bottom of the equipment. Magnetic version is also available for easy installation.

Unconscious Alarm Control panel Installation

Sown below is the dimension and wall-mount screw hole location diagram.



Door Lock Status Installation

Please read the precautions before installation:

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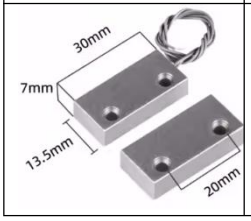
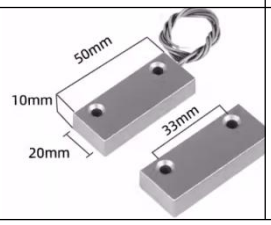
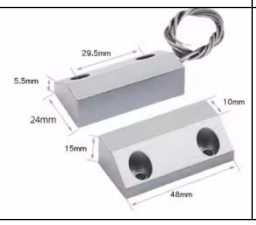
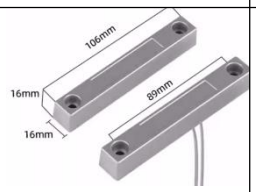
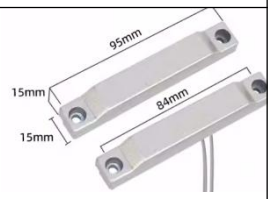
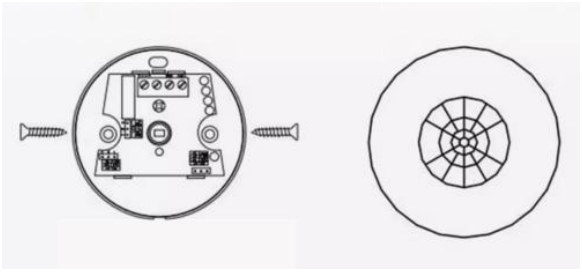
- Please use the professionally qualified installation tools to guarantee the safety of the construction personnel
- Installation position must be far away from the fire source, strong electric field, magnetic field etc., otherwise damage will be resulted
- ChinoINT reserves the interpretation of installation

51	52	56	58	59
				

Hardwired Motion Sensor Installation

Sown below is the wall-mount screw hole location diagram.



Emergency Call Bell Panel Installation

The installation is simple and follow general 86 box installation methodology.

Warning

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Product Warranty and Customer Support

ChinoINT warrants all products free from defects in material and workmanship for a period of one year from the date of shipping. During the warranty period, we will, at our position, either repair or replace any product that proves to be defective. To report any defect, please inquiry sales@chinoint.com

Unauthorized opening and improper repairs on the device may result in substantial damage to equipment or endanger the user. The product described in this documentation may be operated only by personnel qualified. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products. Always disconnect the power plug before you open the device.

Please have the model, serial number and a detailed problem description available when you call. If the problem concerns a particular reading, please have all meter readings available.

This warranty does not apply to defects resulting from unauthorized modification, misuse. If you install or exchange system expansion and damage your device, the warranty becomes void.

Product Warranty and Customer Support

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.