

QCA12E-WG

*Wi-Fi 802.11b/g Assist Point with Call
Pendant, 2 Aux Sockets for Bed Sensors*



The future is here, and it's wireless!

Questek's Wi-Fi products offer the latest generation of wireless nurse call that work with standard 802.11b/g Wi-Fi networks. No requirement for extensive cabling infrastructure, simply install in desired locations and leverage on your existing Wi-Fi infrastructure with minimal impact on the network.

Call points are designed for health care environments that demand secure and reliable communication protocols with guaranteed message delivery. Requires QSWCA-N01 Wi-Fi CareView Adapter 1.0 and CVNC Questek CareView 1.5 or above software.

Features

- Assist and Cancel buttons
- Socket for Call Pendant
- 2 Auxiliary sockets for Bed Sensors (Bed Vacated/Bed Wet) with high/dementia care modes of operation
- Built-in audible and visual (green/red LED) reassurance indicators
- Ultra-low power battery operation
- Easy battery replacement
- Fully monitored bi-directional communications over TCP/IP, HTTP+JSON
- Static and dynamic IP addressing
- Supports 64/128-bit WEP, WPA2-PSK authentication with AES encryption
- Over the air (OTA) firmware and configuration upgrades
- Easy to clean & maintain
- Easy installation & relocation
- High polish polycarbonate plastic with antimicrobial additive
- Adheres to Australian Standard AS3811-1998 where applicable



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Operation

- When Assist or Call button (via pendant) is pressed the button is latched on and a message is sent to the server
- When the Cancel "C" button is pressed, Assist and/or Call button is cleared and a message is sent to the server
- When Pendant is attached or detached from socket, Call button is latched on and message is sent to the server
- Call point provides audible and visual (green/red LED) reassurance on success/failure conditions
- Call point will retransmit messages at predefined intervals until acknowledged at the server
- Call point sends health and status messages at periodic intervals (e.g. every 15 minutes)

High care mode of operation

Connect AVWB01 Bed Wet or BX234 Bed Exit sensors to either or both Aux 1 and/or Aux 2 sockets.

- When the bed is vacated (must first be occupied), Bed Vacated function is latched on and message is sent to the server
- When the bed is wet (must first be dry), Bed Wet function is latched on and message is sent to the server
- When the Cancel "C" button is pressed, Bed Vacated/Bed Wet functions are cleared and a message is sent to the server
- Call point provides audible and visual (green/red LED) reassurance on success/failure conditions
- Call point will retransmit messages at predefined intervals until acknowledged at the server

Dementia care mode of operation

Connect AVWB01 Bed Wet or BX234 Bed Exit sensors to either or both Aux 1 and/or Aux 2 sockets.

Bed Wet and Bed Vacated functions are not latched and require alarm conditions to be configured via software (Questek CareView 1.5 or above).

The Cancel "C" button has no effect on bed sensors. Bed Wet/Bed Vacated functions are cancelled via QCA023 Presence Point in a typical dementia room configuration.

- When the bed is occupied (must first be empty), Bed Vacated function is set to "Occupied" and message is sent to the server
- When the bed is empty (must first be occupied), Bed Vacated function is set to "Empty" and message is sent to the server
- Call point will retransmit messages at predefined intervals until acknowledged at the server

Configuration

Call point is software configured with network settings and modes of operation. Refer to Installation Guide for more information.

Pairing Procedure

Call points must be paired with a server prior to normal operation.

To send a Hello request during a pairing procedure:

1. Press and hold the Cancel "C" button
2. Press Assist button
3. Release the Cancel button

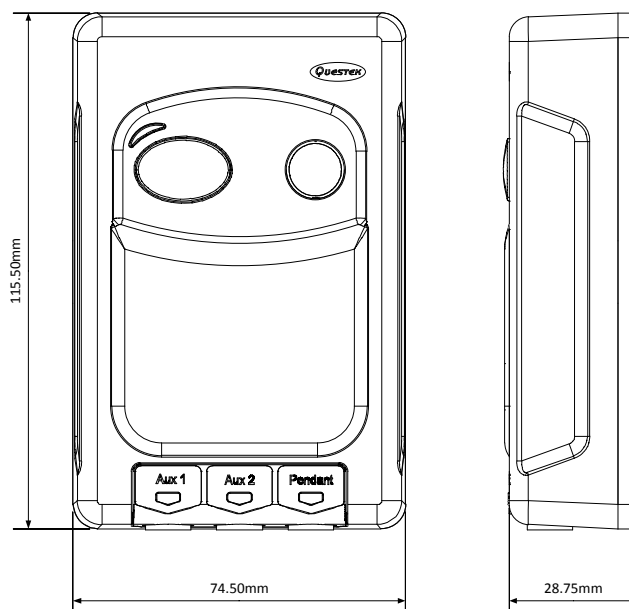
Call point produces an audible chirp if pairing procedure was successful.

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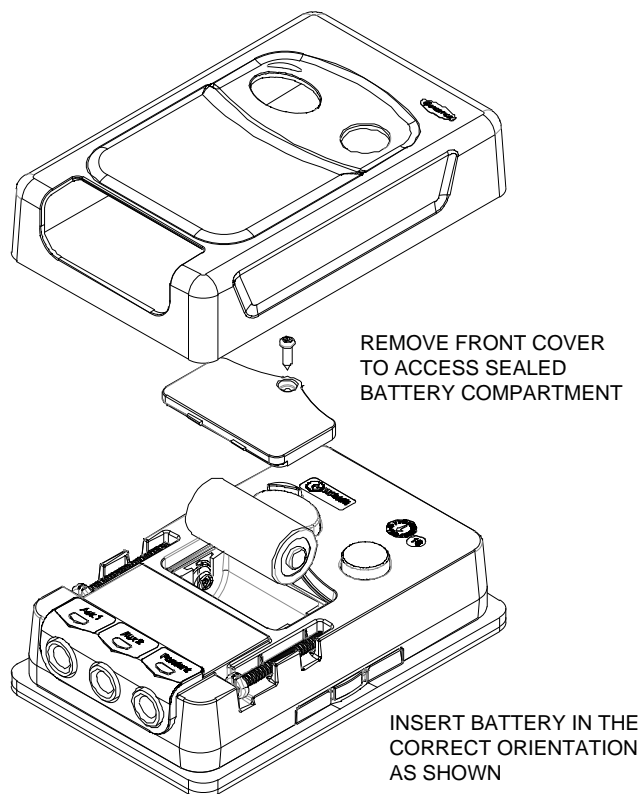
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Dimensions



Battery replacement





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Specifications

Physical Characteristics	Dimensions (w x h x d)	74.5mm x 115.5mm x 28.75mm + 3mm wall mounting plate
	Mounting	Call Point is attached to an Australian standard sized wall plate. Hole spacing 84mm and 100mm
Power	Battery	3 volts Lithium CR123 or CR123A
	Operating Voltage Range	2.5 to 3.2 volts
	Battery Life	3+ years (15 minute Check-In Interval)
	Current (Sleep)	4 to 6µA
	Current (Operating)	40 to 50mA
	Current (Communications)	200mA
Environmental	Operating Temperature Range	0°C to 40°C Battery life is reduced on both low and high ends of the temperature range
Communications	Interface	2.4Ghz IEEE 802.11b/g Wi-Fi Certified WPA2 Enterprise, WMM QoS and WMM Power Save
	Security	WEP-40, WEP-104, WPA-PSK, WPA2-PSK
	Protocols	TCP/IP TFTP HTTP 1.1/JSON DHCP or Static IP Layer 3 Addressing
	Wi-Fi Output Power	14dBm
	Wi-Fi Receiver Sensitivity	-72dBm 54Mbps/s 10% PER -86dBm 11Mbps/s 10% PER
	802.11b/g Channels	1, 6, 11
Functions	Battery Measurement	Key: Batt Values: 2000-3700 Units: mV
	Temperature Measurement	Key: Temp Values: 0-40 (on chip temperature) Unit/Precision: Degrees Celsius
	Assist Button	Key: Button1 Values: 0 = Reset, 1 = Latched
	Call Button (via Pendant)	Key: Button2 Values: 0 = Reset, 1 = Latched
	Bed Wet Sensor	Key: BedWet1 Values: 0 = Dry, 1 = Wet
	Bed Vacated Sensor	Key: BedVacated1 Values (high care mode): 0 = Reset, 1 = Vacated Values (dementia mode): 0 = Empty, 1 = Occupied

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Performance	Battery Life	Check-In Interval (mins)		Est. Battery Life (years)	
		3		1+	
		7		2+	
		15 (recommended)		3+	
	Communication	Security	Bytes Tx/Rx	Roundtrip (ms)	
		None	TBA	TBA	
		WEP	TBA	TBA	
WPA2		TBA	TBA		
Audible and Visual Reassurance	Operation	Sounder	LED Indicator		
	Assist/Call button is pressed	Chirps once and then chirps once every 10 seconds (success) OR Off (failure)	Illuminates green for 1 second and then flashes green once every 2 seconds (success) OR flashes red once every 2 seconds (failure)		
	Cancel button is pressed	Off	Off (success) OR flashes red once every 2 seconds (failure)		
	Hello request	Chirps once (success)	Off		
	Operation (dementia)	Sounder	LED Indicator		
	Bed is empty	Off	Illuminates green for 1 second		
	Bed is occupied	Off	Illuminates green for 1 second		
	Bed is dry	Off	Illuminates green for 1 second		
	Bed is wet	Off	Illuminates green for 1 second		
	Bed Wet/Vacated alarms must be cancelled via QCA023 Presence Point in a typical dementia room configuration				
	Operation (high care)	Sounder	LED Indicator		
	Bed is occupied	Off	Illuminates green for 1 second		
	Bed is empty/vacated (must first be occupied)	Chirps once every 10 seconds (success) OR Off (failure)	Flashes green once every 2 seconds (success) OR flashes red once every 2 seconds (failure)		
	Bed is dry	Off	Illuminates green for 1 second		
	Bed is wet (must first be dry)	Chirps once every 10 seconds (success) OR Off (failure)	Flashes green once every 2 seconds (success) OR flashes red once every 2 seconds (failure)		



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Ordering Information



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802.11b/g Wi-Fi Assist Point with Call Pendant, 2 Aux Sockets for Bed Sensors (AP3301 Pendant Cord not included)



AP3301

Single Button Pendant Cord



BX234

Bed Exit Sensor



AVWB01

Wet Bed Sensor

Accessories



CR123A

Replacement 3V 1400mAh Lithium Battery



QCA-MP

Australian standard sized vertical mounting plate with adhesive contact



QCA-BP

Australian standard sized vertical blank plate

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Installation

