



## QT616 FALL SENSOR

INFRARED (IR) / RADIO FREQUENCY (RF)



### IMPORTANT NOTE ABOUT COMPATIBILITY WITH QUANTEC SYSTEMS

The QT616 IR/RF fall sensors are not compatible with Quantec IR call points, IR ceiling receivers and RF receivers manufactured before year 2000. The new features, 'User ID' and 'Low Battery' signal described below, will only work on compatible Quantec systems manufactured after 1 July 2010. If in doubt, please contact your Vendor for advice.

### ITEMS SUPPLIED (dependent on model purchased)

1 x QT616 patient neck pendant / QT616 patient waist pendant  
1 x lanyard (90 cm end-to-end length, breakaway safety type) used with QT616 neck pendant  
1 x carabiner clip used with QT616 waist pendant  
1 x user instruction (this document)

### FEATURES

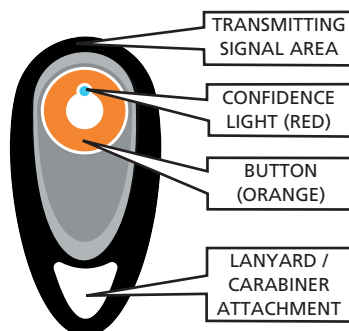
The QT616 (shown right) allow users to activate calls on a Quantec system. It has the following features:

- can be worn either around the neck using a lanyard, or body worn on the waist using a carabiner clip.
- activates when the button is pressed or if the user falls (an internal accelerometer provides automatic fall detection)
- generates both IR and RF signals when activated.
- the Quantec Controller is sent a 'low battery' signal if the QT616's battery charge is running low.
- each QT616 can be configured to generate different call levels. The default factory settings are Standard Call for a button press and Emergency Call for fall detection.
- each QT616 can be assigned a unique 'User ID' enabling Quantec to identify the user by name.
- call levels and User IDs assigned to a QT616 can be changed by using the QT423 Quantec Configurator (see 'RECONFIGURING THE QT616' overleaf for details).
- by default, utilises Quantec's 'power save mode' which maximises the QT616's battery life.

**Note:** 'Power save mode' is not compatible with 800 Series systems. Therefore, if a QT616 is used on 800 Series systems they will have to be reconfigured using the QT423 Configurator to disable this feature.

### OPERATION

1. The QT616 activates manually when the orange button is pressed or automatically if the user falls. This will fill the local area with IR and RF signals.
2. Upon activation, the QT616's confidence light flashes red to confirm that a signal is being transmitted.
3. The IR and RF signals generated by the QT616 are picked up by compatible Quantec IR call points, IR ceiling receivers and RF receivers within range.
4. The appropriate call response is performed by the Quantec system and the QT616's call level, location and User ID are indicated at Quantec display units.



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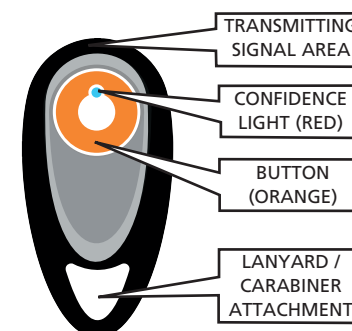
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## IMPORTANT NOTE ABOUT IR TRANSMISSION

As with most IR transmitters, the QT616 emits directional IR signals with varying strengths (shown right). When triggered in the proximity of an IR receiver the QT616 can be held in most orientations, as the IR signal will scatter and bounce to locate the receiver. A clear line of sight from transmitter to receiver is not essential.

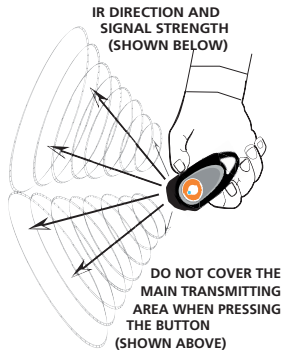
At the extremities of the QT616's operating range (10 m), the IR signal becomes more directional and requires a clearer line of sight from transmitter to receiver. In this mode, performance is improved if the QT616 is orientated in the direction of an IR receiver when triggered. Also, to improve transmission coverage, use more IR call points and IR ceiling receivers (installed no greater than 10 m apart).

## BATTERY

Each QT616 has an internal CR2 3 volt battery, which is user replaceable. Do not use any other type of battery as this could damage the QT616 and void its warranty. Dispose of the battery following the manufacturers' recommended procedures.

The battery life depends on frequency of use but typically is between 6 to 12 months. To manually check the battery, press its button and the confidence light flashes once to confirm the battery is OK or flashes five times when the battery charge is low. Also, Quantec's datalogger records low battery signals; this log will need to be accessed to find out which units need their batteries changing.

To change the battery, simply pull off the battery's cover. Remove the used battery and replace with a new one, observing correct polarity (shown right). Finally replace the cover. **Note:** If you have changed a battery always test the QT616 before it is re-issued to its user.



(BATTERY COVER REMOVED)

## RECONFIGURING THE QT616

The QT423 Quantec Configurator enables the QT616's operation to be programmed to suit the requirements of a specific site. It allows a trained engineer to assign different call levels, enable/disable the RF emitter, set a User ID code (0 to 255), set RF Group Address (0 to 15) and disable 'power save mode'. Note that a QT423A adaptor is required for connection to the QT423. Refer to Document No. DNU0423000 for further details about the Quantec Configurator.

## TESTING THE QT616

The QT302RT Quantec test IR ceiling receiver verifies the correct IR operation of the QT616. It is recommended that at least one is used per system. Please be aware when testing the QT616's IR operation that any radio receivers within its range may trigger at the same time.

## TECHNICAL SPECIFICATION (FACTORY DEFAULTS)

Infrared . . . . . 940 nm modulated @ 38 KHz  
Infrared range . . . . . 10 metres line of sight\*\*  
Radio frequency . . . . . (RF868.3 MHz - this product is license exempt as per EN 300220-2)  
Radio range . . . . . 60 metres\*\*  
Weight (including battery) . . . . . 40 grams  
Overall dimensions (main body) W x H x D . . . . . 42 mm x 83 mm x 33 mm  
Ingress Protection rating . . . . . IP 41  
Battery . . . . . CR2, 3 volt, lithium (non-rechargeable)

\*\* *Dependent on receiver, physical conditions and environmental factors.*



Manufacturer: Computationics Limited (C-TEC), Challenge Way, Martland Park, Wigan, Lancashire WN5 0LD. [www.c-tec.com](http://www.c-tec.com)

Errors & Omissions Excepted (E&OE).

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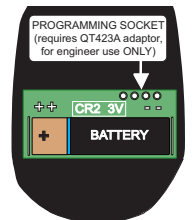
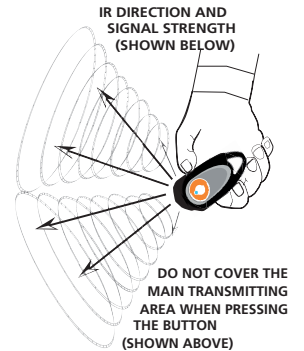
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