



Synco™900

Room Unit

QAW910

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- **Wireless room unit**
 - **RF communication based on KNX standard (868 MHz, bidirectional)**
 - **Operation and display of space heating functions**
 - **Acquisition of the room temperature**
 - **Battery-powered by commercially available 1.5 V batteries**

Use

- For integration into the Siemens Synco 900 system
- Selection of room operating mode, timer function and room temperature setpoint readjustment
- Display of space heating function and status messages
- Acquisition of the room temperature in HVAC plant
- Especially suited for:
 - Renovation projects (old buildings, museums, churches, historical buildings, etc.)
 - Difficult wall-mounting situations (sandstone, glass, etc.)
 - Variable floor plans (different décors, other furniture)
 - New houses and buildings

Equipment combinations

The QAW910 room unit is designed for use with the Siemens Synco 900 system. For more detailed information about equipment combinations, refer to the Data Sheet covering the central apartment unit (CE1N2707en).

Ordering

When ordering, please give quantity, product name and type reference.

Scope of delivery

Each QAW910 is supplied complete with alkaline batteries, fixing material and Mounting Instructions.

Product documentation

The Operating and Commissioning Instructions for the QAW910 are contained in the product documentation of the central apartment unit.

Functions

Main function

The QAW910 is used for the operation and display of basic space heating functions. It also forwards the acquired room temperature to the central apartment unit, either periodically or when changes occur. The room temperature is shown on the display of the QAW910.

Room operating mode

The room operating mode can be switched from Automatic to Manual, and vice versa. The selection is made with the "Mode" button and shown on the display.

Timer function

The timer function is used to activate Comfort mode of the respective room for up to 24 hours. The setting is made with the "Timer" button and shown on the display.

Room temperature setpoint readjustment

The room temperature setpoint can be readjusted with the setting knob. The readjustment made is shown on the display.

Binding

The binding is used by the QAW910 to sign on at the central apartment unit, thus ensuring integration into the RF system. The binding process is triggered via the multifunction button. The RF symbol appears on the display.

Status query

The multifunction button can be used to query the batteries' capacity. It appears on the display. When the batteries are close to exhaustion, their state is constantly displayed.

RF binding test

The multifunction button can be used to trigger a binding test. This test is made to check the radio link to the central apartment unit. The RF symbol appears on the display.

Supply state

The multifunction button can be used to reset the QAW910 to the default state as supplied. Then, the QAW910 must be reintegrated into the system.

Error and maintenance messages

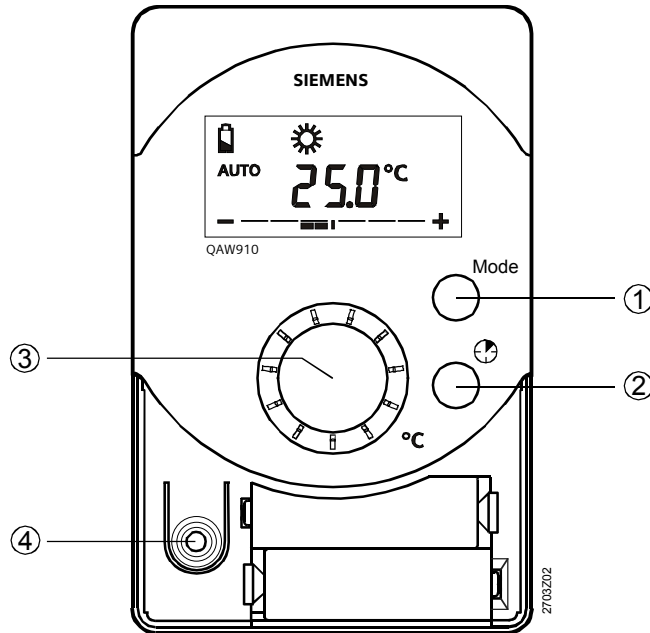
All error and maintenance messages are forwarded to the central apartment unit where they appear on the display.

The following messages are delivered by the QAW910:

Error messages	Maintenance message
Sensor error (failure of room temperature sensor) Communication error (no communication for one hour)	Batteries exhausted (battery life \leq 3 months)

Operating and indicating elements

Operating elements

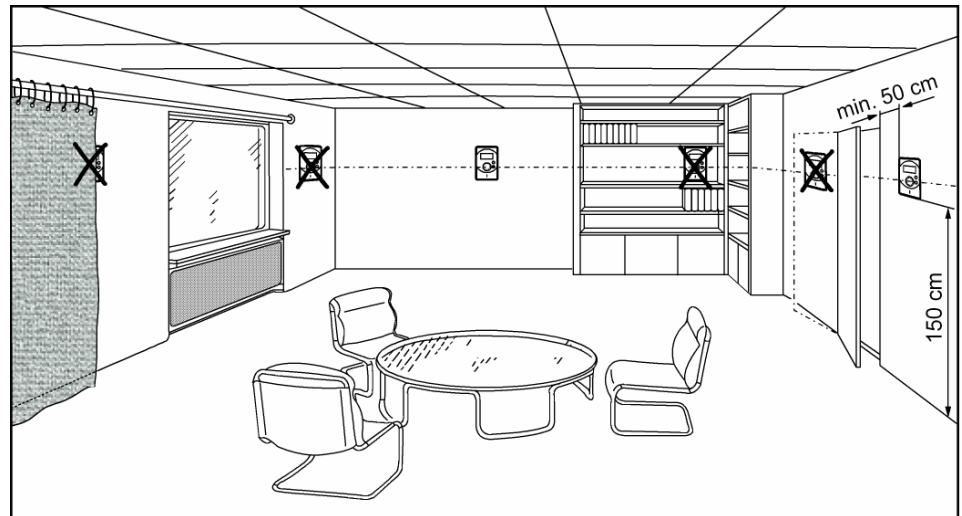


Operating elements	Function
① "Mode" button	Selection of room operating mode: (Automatic, Manual, Comfort, Precomfort, Economy, and Protection)
② "Timer" button	Activation and setting of timer function
③ Setting knob	Room temperature setpoint readjustment. It acts on the Comfort and Precomfort setpoint within a range of -3 to +3 °C
④ Multifunction button (inside the battery compartment)	Battery state query RF binding test Binding Disconnect device from system Reset to supply state

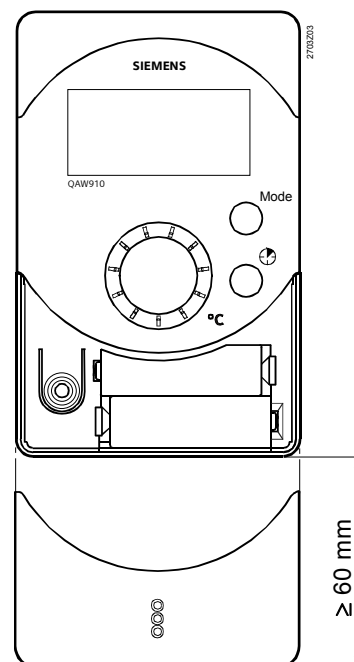
For more detailed information about the functions and operation of the QAW910, refer to the product documentation covering the central apartment unit.

Mounting location

The QAW910 must be mounted inside the house or building, on an inner wall about 1.5 m above the floor. To ensure that the QAW910 will acquire the room temperature as accurately as possible, the following conditions must be observed:



- The QAW910 must not be mounted on an outer wall, not in niches, bookshelves, and not behind doors or curtains
- Temperature acquisition must not be adversely affected by direct solar radiation, air drafts, or other heat or refrigeration sources
- The permissible environmental conditions must be observed
- The QAW910 must not be exposed to dripping water
- For notes relating to engineering and mounting RF devices of the Siemens Synco 900 system, refer to Data Sheet CE1N2708en
- The base of the room unit must be fitted on a flat wall
- Minimum clearance at the bottom should be 60 mm to ensure that the battery compartment is easily accessible



Installation Mounting with the base:
The QAW910 can be fitted to most commercially available recessed conduit boxes or directly on the wall.

Note Mount the QAW910 first and then insert the batteries.

Commissioning Prior to commissioning, check to ensure that the QAW910 is correctly fitted to the wall and that the batteries are correctly inserted.

Maintenance / battery change The QAW910 is maintenance-free.
The system indicates when batteries must be replaced. The batteries are located in the battery compartment. Batteries can be changed without removing the sensor from the wall and there is no need for using tools (reversed polarity protection).

Disposal





In terms of disposal, the QAW910 is classified as electronic scrap conforming to the European Directive 2002/96/EG (WEEE) and must not be disposed of as domestic waste. The relevant national legal regulations must be complied with. The unit must be disposed of through the relevant channels. Local and currently valid legislation must be observed. Exhausted batteries must be disposed of in compliance with environmental regulations.

Warranty

Application-related technical data are only warranted in connection with the Siemens Synco 900 system. For equipment combinations, refer to the Data Sheet of the central apartment unit.

When using the QAW910 together with third-party devices, correct functioning must be ensured by the user. In that case, Siemens will assume no responsibility for service and warranty.

Technical data

Power supply	Type of battery	2 x alkaline batteries LR6 (AA) 1.5 V
	Battery life (capacity ≥ 2.5 Ah)	3 years
RF	Frequency	868 MHz (bidirectional)
	Range	typically 30 m inside buildings
	Protocol	KNX RF compatible 
Temperature sensor	Sensing element	NTC 10 kOhm
	Measuring range	0...50 °C
	Time constant	20 minutes
Display	Type	segment LCD
	Resolution	0.1 °C
Standards	 conformity to	
	EEC directive	89/336/EC
	- Immunity	- EN 61000-6-1/2
	- Emissions	- EN 61000-6-3/4
	Low-voltage directive	73/23/EC
	- Electrical safety	- EN 60730-1
RTTE Radio & Telecom. Equipment	99/5/EEC	
Radio communication	- EN 300220-1, EN 300220-3, EN 301489-3	

Protection	Safety class	III to EN 60730
	Housing	IP40 ¹⁾ to EN 60529
	Degree of pollution	2 to EN 60730

Dimensions	refer to "Dimensions"	
Weight	Unit complete with accessories	0.280 kg
Housing material	plastic ASA+PC	
Housing color	white NCS S 0502-G	

Environmental conditions		operation	transport	storage
		IEC-60721-3-3	EN-60721-3-2	EN-60721-3-1
	Climatic conditions	class 3K5	class 2K3	class 1K3
	Temperature	0...+50 °C	-25...+70 °C	-20...+65 °C
	Humidity	5...95 % r.h. (noncondensing)	<95 % r.h.	5...95 % r.h.
	Mechanical conditions	class 3M2	class 2M2	class 1M2
	Elevation above sea level	min. 700 hPa, corresponding to max. 3,000 m above sea level		

¹⁾ Completely mounted

Dimensions

Dimensions in mm

