



Synco™ living

RF Repeater

ERF910

-
- **Wireless RF repeater for extending plant**
 - **RF communication based on KNX standard (868 MHz, bidirectional)**
 - **Mains-powered AC 230 V (with external power pack)**

Use

- For integration into the Siemens Synco living system
- Extending and ensuring RF coverage in the Siemens Synco living system
- Especially suited for:
 - Renovation projects (old buildings, museums, churches, historical buildings, etc.)
 - Difficult wall-mounting situations (sandstone, glass, etc.)
 - New houses and buildings

Equipment combinations

The RF repeater is designed for use with the Siemens Synco living 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 ERF910 is supplied complete with power pack, fixing material and Mounting Instructions.

Product documentation

The Operating and Commissioning Instructions for the ERF910 are contained in the product documentation of the central apartment unit.

Functions

Main function

In operation, the ERF910 repeats the RF telegrams from the devices attuned to it.

Binding

The binding is used by the ERF910 to sign on at the central apartment unit, thus ensuring integration into the RF system. The binding process is triggered via the multifunction button. It is indicated by the multifunction LED.

Status query

The multifunction button can be used to query the state of power supply. Availability of power is indicated by the multifunction LED.

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 test is indicated by the multifunction LED.

After triggering the binding test, delivery of the RF telegrams is indicated for 2 hours by the multifunction LED.

Supply state

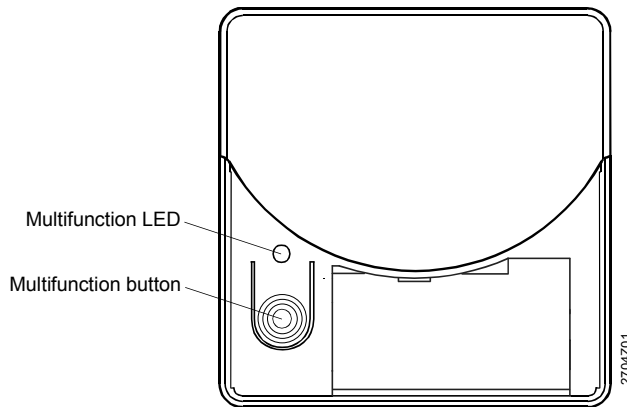
The multifunction button can be used to reset the ERF910 to the default state as supplied. Then, the ERF910 must be reintegrated into the system.

Error and maintenance messages

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

The following error messages are delivered by the ERF910:

Error messages
Communication error (no communication for one hour)



Overview of functions of the indicating and operating elements of the ERF910:

Multifunction LED	Multifunction button
<ul style="list-style-type: none"> • Power supply • Binding process • Delivery of RF telegrams 	<ul style="list-style-type: none"> • Status query power supply • RF binding test • Binding • Disconnect device from the system • Restoring the supply state

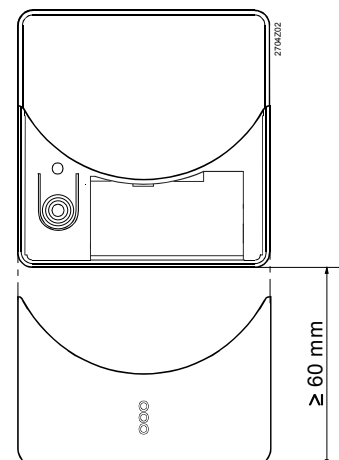
For more detailed information about the functions and operation of the ERF910, refer to the product documentation covering the central apartment unit.

Notes on engineering and operation

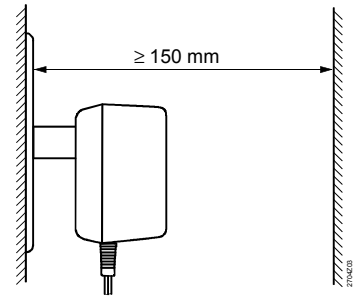
Mounting location

To ensure optimum operation of the ERF910, the following conditions must be observed:

- The ERF910 must be mounted inside the house or building, close to a power outlet (connecting cable of power pack: 3 m)
- The permissible environmental conditions must be observed
- ERF910 and power pack must not be exposed to dripping water
- For notes relating to engineering and mounting RF devices of the Siemens Synco living system, refer to Data Sheet CE1N2708en.
- The base must be fitted on a flat wall
- Minimum clearance at the bottom should be 60 mm to ensure that the repeater's cover can be easily opened



- There must be sufficient clearance by the power outlet to ensure that the power pack can be easily plugged in and removed



Installation

Mounting with the base:

The ERF910 can be fitted to most commercially available recessed conduit boxes or directly on the wall.

Note

Mount the ERF910 first and then plug in the power pack.

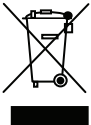
Commissioning

Prior to commissioning, check to ensure that the ERF910 is correctly fitted to the wall and that the power pack is correctly connected.

Maintenance

The ERF910 is maintenance-free.

Disposal



In terms of disposal, the ERF 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.

Warranty


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

When using the ERF 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 pack

Type	Operating voltage primary side	AC 230 V, 50 Hz
	Rated voltage secondary side	AC 7.5 V
	Rated current secondary side	100 mA
	Length of prefabricated connecting cable	3 m

Technical data – ERF910

Power supply	Power consumption	max. 0.2 VA
RF	Frequency	868 MHz (bidirectional)
	Range	typically 30 m inside buildings
	Protocol	KNX RF compatible 
Electrical connections	Screw terminals for	1.5 mm ² (connections interchangeable)

General technical specifications

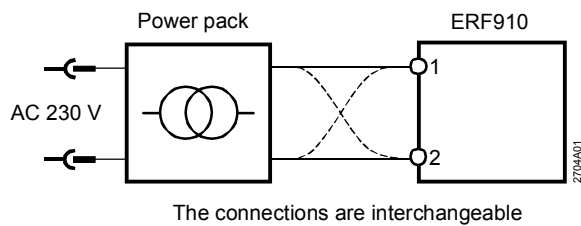
Dimensions		refer to "Dimensions"
Weight	Unit complete with accessories	0.384 kg
Housing material		plastic ASA+PC
Housing color		white NCS S 0502-G
Standards	 conformity to	
	EMC directive	2004/108/EC
	- Immunity, Emissions	- EN 61000-6-1, EN 61000-6-3
	Low-voltage directive	2006/95/EC
	- Electrical safety	- EN 60950-1
	RTTE (Radio & Telecom. Equipment)	1999/5/EC
	- Wireless communication	- EN 300220-2, EN 301489-1, EN 301489-3
Directive of Energy-using Products (EUP)	2005/32/EC	
[Anex I, ecodesign requirements, 1b]	278/2009/EC	
Ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies		
Protection	Safety class	III to EN 60730
	Housing	IP40 ¹⁾ to EN 60529
	Degree of pollution	2 to EN 60730
Environmental compatibility	Environmental product declaration	ISO 14001 (Environment)
	CE1E2704en provides information on environmentally compatible product design and assessment (RoHS compliance, composition of substances, packaging, environmental benefit and disposal)	ISO 9001 (Quality) SN 36350 (Environmentally compatible products) 2002/95/EC (RoHS)

¹⁾ Completely mounted

Environmental conditions

	operation	transport	storage
	EN 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. 3000 m above sea level		

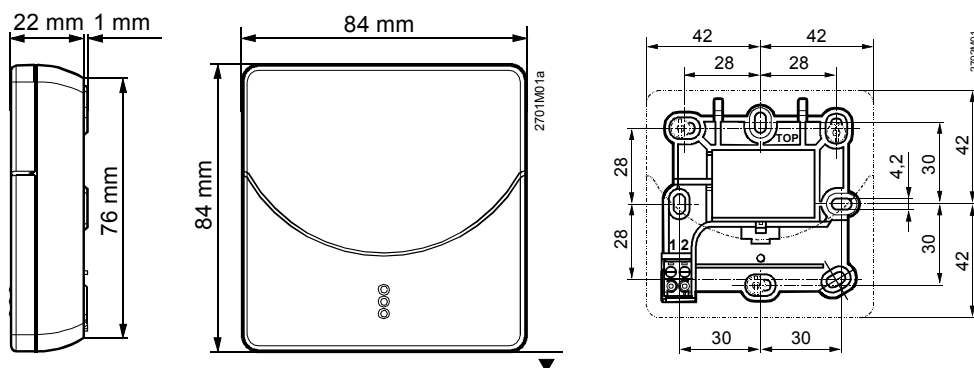
Connection diagram



Dimensions

Dimensions in mm

ERF910



Power pack

