# Alpha IP: Room Control Unit Radio Analog

The Alpha IP Room Control Unit Radio Analog registers the room temperature in the assigned heating zone and regulates it via connected Alpha IP Radiator Thermostats or the base station for floor temperature adjustment.

The precise temperature registration allows to establish a perfectly matched room-by-room temperature control system for maximum user comfort.

The desired room temperature in the allocated heating zone can be set comfortably via a rotary control with fine ratchet and the clearly visible scale. The setpoint limiters below the rotary control allow the limitation of the adjustment range as well as a set value calibration.

The Alpha IP Room Control Unit Radio Analog is marked by its high-quality appearance, integrating harmoniously into a modern room architecture not least due to its slim design. It offers an optimum price-performance ratio for rooms where only a very good temperature control is desired without the comfort function of the display variant.



#### 1.1 Features

- Optimum price-performance ratio
- · Patented set value calibration
- High-quality OEM design with a multitude of optical differentiation possibilities
- Safe 868 MHz radio technology for optimum positioning without cabling effort
- Flat design and small dimensions (86 mm x 86 mm x 27,5 mm)
- · Rotary control with soft ratchet

- Wall and flush-type box installation (Germany & Switzerland)
- Optionally with limitation of the room temperature setting range to a maximum and/or minimum value
- · Compatible to Homematic IP
- Encryption and authentication of all data packets according to safety standards as e. g. AES-128 and CCM/RFC3610

The Möhlenhoff OEM product quality ensures easy, intuitive installation, operation and maintenance of the entire system.

### 1.2 Variants

In the basic version, the Alpha IP Room Control Unit Radio Analog will be delivered as neutral devices without logo and in white.

Type designation	Designation	Scope of supply
RTA 61001-N1	Room Control Unit Radio Analog	<ul> <li>Room Control Unit Radio in individual packaging</li> <li>Operating Instructions</li> <li>2 x 1.5 V LR03/Micro/AAA batteries</li> <li>2 x set value elements</li> <li>1 x calibration limiter</li> <li>2 x power strips</li> <li>2 x screws 3.0 x 30 mm</li> <li>2 x dowels</li> </ul>



1.3 Optional extensions or differentiations to the ba	basic version
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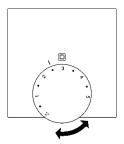
Extension options				
Instructions, language set 1	Detailed instructions for the room control unit can be attached to the scope of delivery of the base station in the following languages (otherwise these are available for download under www.ezr-home.de).	German		
		English French		
		Dutch		
		Italian		
		Spanish		
Instructions, language set 2	Detailed instructions for the room control unit can be attached to the scope of delivery of the base station in the following languages (otherwise these are available for download under www.ezr-home.de).	English		
		Danish/Norwegian		
		Finnish		
		Swedish		
		Polish		
		Russian		

Differentiation possibilities		
Packaging	Individual printing and manufacturing of packaging	
Casing	Individual designs, e. g. square, upright, horizontal format, individual colour	
Casing printing	Laser marking of the company logo on the casing, and the individual type designation and the device designation	
Installation bottom	Colour adaptation, form change	
Rotary control	Individual colour adaptation	
Please contact us if you have further wishes.		



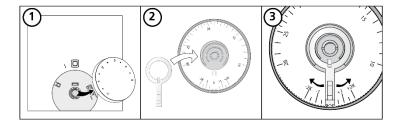
## 2 Operation

The room control unit can be operated comfortably via the rotary control with clearly visible scale. The user sets the desired comfort temperature by simple turning. For establishing the operational readiness, generally only a pairing process via a button is necessary in order to integrate into the radio network.



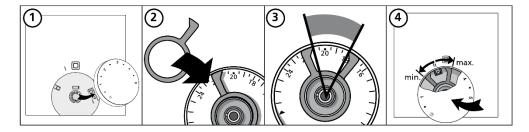
### 2.1 Adjustment range of the set value balance

A setpoint limiter is inserted into the removable rotary control. It allows a set value balance of -2 K to 2 K in 0.5 K increments.



#### 2.2 Limiting the temperature range

Two further setpoint limiters can be inserted into the removable rotary control, allowing a limitation of the temperature range.





## 3 Technical Data

Type designations	RTA 61001-N1
Voltage supply	2x 1.5 V LR03/micro/AAA
Power consumption	max. 50 mA
Battery service life	2 years (typ.)
Reverse polarity protection	Mechanical
Radio technology	Radio, 868.3 and 869.525 MHz SRD band, cat. 2
Communication protocol	Homematic IP
Duty cycle	868.3 MHz < 1% per h; 869.525 MHz < 10% per h
Typical radio free-field range	250 m (in open air)
Degree of protection	IP20
Admissible ambient temperature	0 °C to 50 °C
Admissible ambient humidity	5 to 80 %, not condensing
Storage/transport temperature	-10 °C to +50 °C
Standards and regulations	2014/53/EU radio installations; 2014/30/EU EMC; 2011/65/EU ElektroG, resp. RoHS compliant
Material	ABS (casing, base, rotary control) / PMMA (System key)
Colour	RAL 9003 (signal white)
Outer dimensions	86 x 86 x 22,5 mm / 27,5 mm
Weight	90 g (including battery)
Target temperature setting range	1 to 5 corresponds approx. to $8-30^{\circ}\text{C}$ / $240^{\circ}$ setting range
Measuring range: actual temperature registration (int. sensor)	0 – 40 °C
Measuring accuracy of internal NTC	±0.5 K
Packaging dimensions	122 x 112 x 70 mm

## 3.1 Dimensions

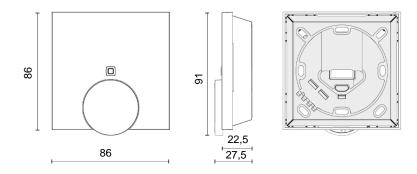


Fig. 1: Dimensions Alpha IP Room Control Unit Radio Analog (indications in mm)

## 3.2 Approvals & certificates



The CE identification documents that the products placed on the market comply with the applicable requirements of the EU Directives.

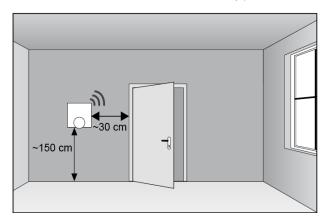


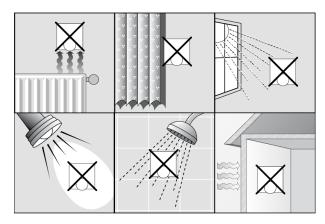


## 4 Installation notes

### 4.1 Preconditions

The safe 868 MHz radio technology of the system offers numerous advantages to users and installers as e. g. the optimum positioning of the room control units in the heating allocated zone without any cabling efforts. This makes annoying caulking and plastering work obsolete. At the same time, all installation conditions can be met without any problems.





#### 4.2 Installation

The room control units are installed comfortably on-surface, with stripes or in a flush-type box in a few simple steps.

