



The Ratio® repeater 2-Level UPR230/02 serves for the amplification of the radio telegraph between Ratio® radio senders and Ratio®-receivers. It is used in case of range difficulties between Ratio®-radio senders and Ratio® receivers. The Ratio®-UP-Repeater has to be connected to power supply. There is no need to learn in devices. All received telegrams will be transmitted.

The Ratio®-Repeater 2-level has two modes, the 1- and the 2-Level-mode, which can be chosen by means of the two LED-push-buttons. At the 1-Level-mode, telegrams are only once amplified, that means only the original telegram. At the 2-level-mode also telegrams of the Ratio®-Repeater at 1-level-mode are being amplified..

Technical Data	Repeater 2-Level UPR230/02	Remarks
Functions	Receiving and strengthened sent of valid radiograms	
Radio technology	Protocol EnOcean, Frequency 868,3MHz Transmission power max. 10mW EIRP Modulation ASK	
Operating data	Rated voltage 230V 50/60Hz Idle current consumption ca. 20mA, Power Input ca. 4VA	Rated current 0,5A Power input ca. 25mA Power loss ca. 0,9W
Security	By external automatic cotout 13A Typ C	
Serving and display elements	1 button „LRN“, 1 button „CLR“, 1 button LED „LRN“, 1 button LED “CLR”	
Connection	Screw clamp 4mm2	Two wires 1.5 mm can be problem-free under –wedge.
Mechanical Data	Casing: plastic Lexan, Weight: 80g	Dimensions: D=51mm H=25mm
Mounting / Assembly/ Installation	Flush or surface mounting	e.g. behind a socket or in a synthetic casing
Environmental conditions	Environmental temperature in operation -20°C ... +40°C Storage temperature -40°C ... +85°C Relative humidity (non-condensing) 5 ... 90%	
Protection category	IP20 after EN 60529	
Norm conforming assembly	Device conforms to EN 090-2-2 and EN 60669-2-1	
Approbation	R&TTE guidelines 1999/5/EC and conforming to EU guidelines.	
Labeling	According to EMV guidelines (residential and functional buildings), low voltage guideline. ROHS conforming according to 2002/95/EC.	

Safety references

The installation of this equipment may take place only via proven technical personnel.
 Before working on the equipment the current supply must be switched off.
 The valid safety and rules for the prevention of accidents are to be considered compellingly.

Area of application

- The equipment may only
- To be used for the regulation-moderate employment
 - To be installed firmly in a dry an clean environment
 - To be installed in such a way that an access is possible only with a tool

Diagram of connections	Designation	Typ	Article number
	Repeater 2-Level, Supply voltage 230VAC	UPR230/02	9004000