

CENTRAL READING SYSTEM AMR 40

DESCRIPTION

The AMR 40 central reading system is a modernd and efficient solution for automated data collection and transmission from measuring devices such as heat cost allocators, water meters, radio modules for water meters, heating meters, etc. This system consists of control unit called Gate and several collection units Repeaters that extend the readout network and ensure reliable data transmission from individual mesuring devices.



KEY SYSTEM COMPONENTS

<u>Main unit Gate</u>

The Gate is the control element of the system that coordinates the collection of data from Repeaters and measuring devices. The unit ensures that all collected data is correctly processed and then securely sent to a secure cloud storage, so the unit must be connected to the Internet (via GSM modem). The unit requires an electrical power supply. For smaller installations, only the Gate unit can form the readout network.



Collection unit Repeater:

The collection units are battery powered and can be easily placed in any location that meets good radio conditions. These units receive data from the measuring devices and forward it to the Gate main unit. This ensures that even measuring devices that are out of range of the Gate can reliably transmit their data. Their use is voluntary, and they are used to extend the readout network.



Advantages of the system

Thanks to the wireless collection units, the system can be placed in buildings with problematic power availability. Another advantage is the user-friendly interface where yu can see all the readings and configure the system settings. The user interface is continuously accessible from anywhere, just log in via a web browser.

TECHNICAL PARAMETERS

Main with Cate	
Main unit Gate	
Frequency band	ISM 868
Frequency of the carrier wave	868.27 Mhz, 868.95 MHz
Performance	12,5 dBm
Keying radius	1,00%
Antenna	Integrated
Transmission protocol	Metra protocol, Wireless M-Bus OMS T1 and C1
Number of measuring devices read per unit	Up to 800
Number of Repeater units in one readout network (per Gate)	Max. 49
Number of directly read Repeaters per Gate unit	20
Number of hops in one branch	10
Power supply	5V/3A/USB connector
Recommended power supply	NovoConnect - model CNXZX3015-050030SA
Protection class	IP 68
Environment	Designed for indoor use
Operating environment	5°C to 55°C
	Rel. humidity <65%
Connection to the Internet	via GSM modem
Amount of data transferred	From 80MB/month - depending on the number of measurung devices and selected frequency of sending data to the cloud
Supported browsers (for GUI work)	Mozila Firefox 100.0 or higher
	Google Chrome 102.0 or higher
	Opera 87.0 or higher
Dimensions	180x180x60 mm

Collection unit Repeater	
Frequency band	ISM 868
Frequency of the carrier wave	868,27 Mhz, 868,95 MHz
Performance	12,5 dBm
Keying radius	1,00%
Antenna	Integrated
Transmission protocol	Metra protocol, Wireless M-Bus OMS T1 and C1
Number of measuring devices read per unit	Up to 800
Number of Repeater units one readout network (per Gate)	Max. 49
Number of directly read Repeaters per Gate unit	10
Number of hops in one branch	10
Power supply	Battery 3,6V size D
Recommended power supply	Battery SAFT LS33600
Protection class	IP 68
Envoronment	Designed for indoor use
Operating environment	5°C to 55°C
	Rel. humidity <65°C
Supported browsers (for GUI work)	Mozila Firefox 100.0 and higher
	Google Chrome 102.0 and higher
	Opera 87.0 and higher
Dimensions	160x89x61 mm





Gate control unit with internet connection via GSM modem

The manufacturer reserves the right to change design, technical specifications and accessories witjout prior notice. K2024/09b