▶ BrunataNet RS485

The BrunataNet RS485 network gives instant overview of electricity, water and heat consumption in apartment buildings – whether the number of households is seven or seven thousand. Meter reading takes place from an ordinary PC without disturbance to residents.

Consumption metering with remote reading

BrunataNet RS485 is Brunata's most advanced system for remote-read consumption metering. Primarily developed for remote reading of electricity, water and heat consumption, the system can also be used for other purposes: for example direct recording of gas consumption, as well as signal communication in contexts such as alarm systems.

BrunataNet RS485 is substantially more economic than earlier versions. This is due to the adoption of a new communication protocol (RS485), which enables us to choose between several different system component manufacturers.

Advantages

Automatic remote reading with the BrunataNet system provides a number of major advantages:

- Manual meter reading is obviously no longer a nuisance. Using BrunataNet for, say, electricity, water and heat can save as many as three visits per dwelling per year for meter reading purposes.

- A current day reading – or for that matter a reading from the 23rd of last month - can be obtained from any meter in the system.

- The extra meter reading work involved when an apartment is vacated is minimal – and need not be performed on the actual day of the move.

- The daily reporting of data from the system's meters ensure that abnormal consumption will be swiftly detected. This means that pipe leaks and other problems can be rectified earlier.

System description

The BrunataNet RS485 system consists of the following core components: consumption meters, radio receivers, data gathering units and optionally a PC. Depending on the number of radio receivers and the size of the network, one or more repeaters and one or more modems may also be needed.

In this context, "consumption meters" refers to heat cost allocators and hotwater, coldwater and electricity meters. Other units, such as gas meters, can also be connected.

The system can further be provided with equipment enabling residents to monitor their own consumption on text TV or the internet for instance.

How the system works

The consumption meters continuously transmit data to the radio receivers in the form of radio signals. Transmission from heat cost allocators takes place in step with consumption and at least once a day. Transmission from electricity and water meters takes place continuously in step with consumption.

The radio receivers then relay the data through the RS485 network to the data gathering unit, which can be directly connected to a PC in the heating engineer's office. Alternatively, the system can relay the data via modem or the internet.

▲ Brunata Net RS485 system
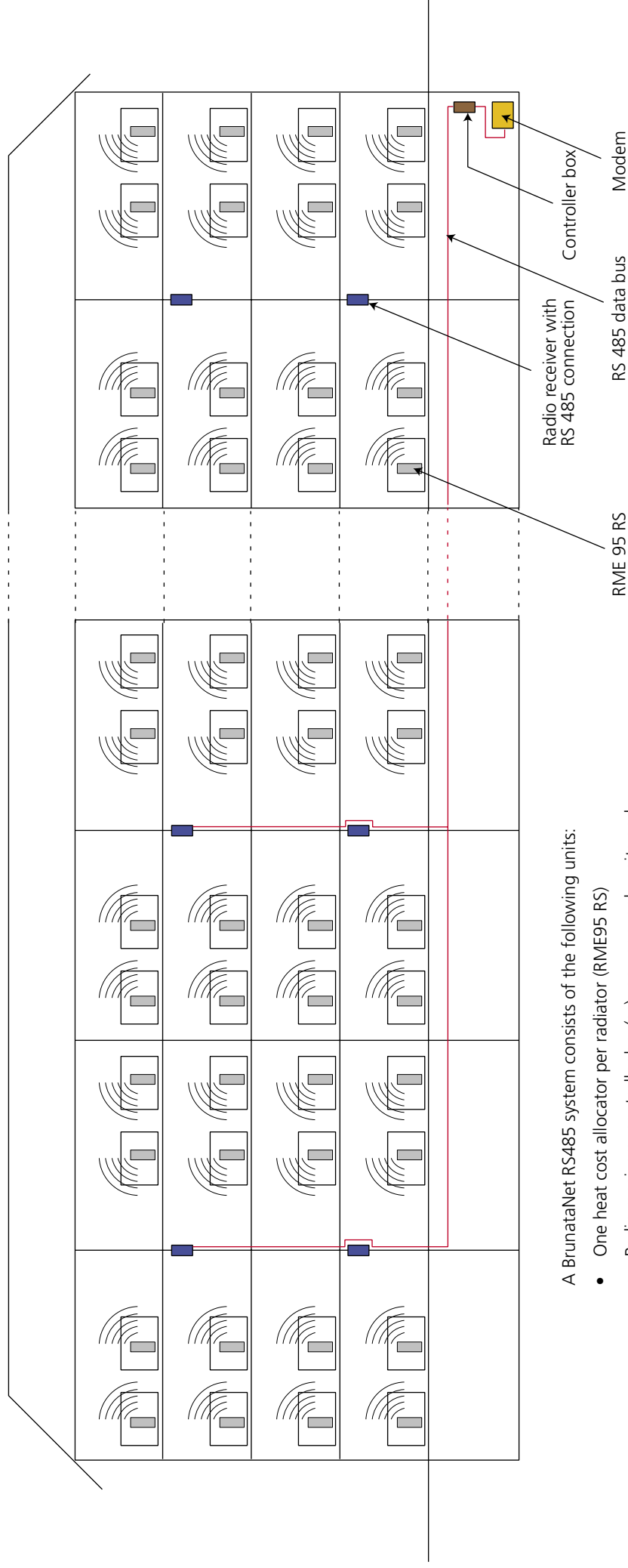
A BrunataNet RS485 system consists of the following units:

- One heat cost allocator per radiator (RME95 RS)
- Radio receivers, controller box(es), power supply units and network repeaters. The number is dependent on the size of the installation and technical factors
- A phone system modem

Possible additional equipment in heating engineer's office:

A PC med installation-specific software

Modem

Controller box

Radio receiver with
RS 485 connection

RS 485 data bus

RME 95 RS