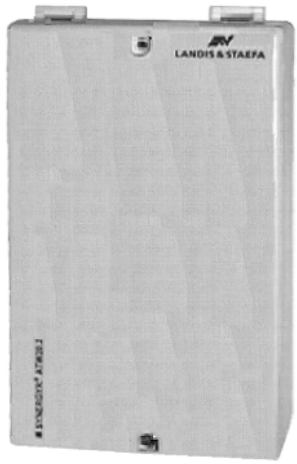
SYNERGYR®

Multiple Antenna ATW20.2



The multiple antenna receives the data delivered via radio and passes them on via the coaxial cable to the central radio readout unit.

Use

The multiple antenna is a component of the Radio Metering System.
For field of use of the Radio Metering System, please refer to data sheet N2860E.

Function

Usually, the multiple antennas receive the consumption data delivered to them from an entire floor and pass them on via the coaxial cable to the central radio readout unit OZW20. By combining several multiple antennas, the reception range of the Radio Metering System is extended.

Ordering

When ordering, please give type reference **ATW20.2**.

Equipment combinations

The multiple antenna is a component of the Radio Metering System and is not suited for use with any other type of system.
A maximum of ten multiple antennas is connected in series to the receiver - the central radio readout unit OZW20 - via the coaxial cable.
For more detailed information, please refer to the Planning Manual, reference no. J2861E.

Technical design

The radio telegrams received by the multiple antenna are passed on to the coaxial cable. The data are neither stored nor changed, but only routed to the central radio readout unit OZW20.
The coaxial cable (e.g. CT100 75 Ω SAT cable) is connected to the multiple antenna by means of F-connectors. The OUT jack routes the data to the OZW20. The next multiple antenna is connected to the IN jack. The multiple antenna is powered by the OZW20 via the antenna cable (DC 5 V).

Mechanical design

The multiple antenna is accommodated in a plastic casing with a hinged cover. The printed circuit board can be accessed after loosening the fixing screw. It carries the IN and OUT jacks to which the coaxial cables with F-connectors are secured.
The coaxial cables are introduced through two openings at the bottom. A red LED serves for checking the proper functioning. It is lit when the functioning of the antenna is ensured and operating voltage of at least DC 4 V is present.

Engineering notes

The local regulations and standards for operating radio equipment and for electrical installations must be complied with. Detailed information on engineering is given in the Planning Manual, reference no. J2861E.

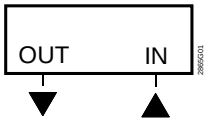
Commissioning notes

The entire radio equipment is commissioned by Landis & Staefa service staff.
The slide switch on the printed circuit board must be set to the mid position (marked "Fern" (remote)).
The radio equipment is supplied with a detailed Operating Manual, reference no. U2861E.

Technical data

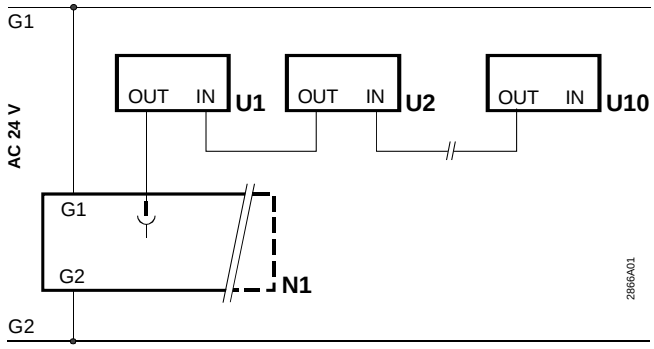
CE conformity to EMC directive	89/336/EEC
Degree of protection	IP22 to EN 60529
Safety class	III to EN 60950
Electromagnetic compatibility	Draft prETS 300683 (Nov. 1995)
Certification to	BAPT222 ZV125 and I-ETS 300 220
Certification no.	G131203J LPD-D
Operating voltage	DC 5 V ±20 %
Power consumption	approx. 5.2 mA
Mains frequency	433.9 MHz
Band width	500 kHz min.
IN and OUT jacks	F-connector (75 Ω for antenna cable)
Attenuation IN→OUT	–0.9 dB ±0.5 dB
Specification of cable	
Attenuation/100 m at 450 MHz	<15 dB
Suitable types of cable	CT100, SAT810, Technisat CE KOAX2150
Perm. ambient temperature	
Transport and storage	–20...+70 °C
Operation	0...50 °C
Weight	0.3 kg

Connections



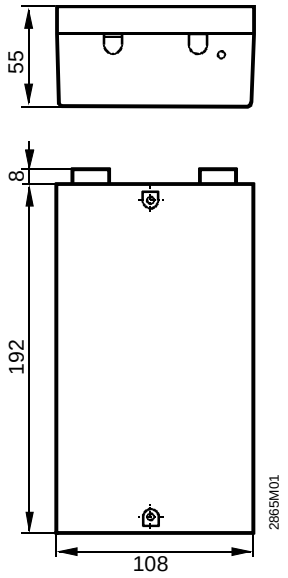
IN Coaxial cable to the next multiple antenna
OUT Coaxial cable to the central radio readout unit

Connection diagram



N1 Central radio readout unit OZW20
U1...U10 Multiple antenna ATW20.2

Dimensions



Dimensions in mm