



Heat Meter - Zenner C5

Part code **ZE105C5**

Contents

- Meter body
- Detachable Calculator
- Wall bracket
- Security cable and clamp
- Fitting kit for the flow pipe temperature sensor

Description

DN15 IUF Ultrasonic Heat meter
 Hard wired MBus
 3/4" connections, 110mm body
 Poered by Mbus and battery
 Qp 1.5 M³/hr

Fitting Instructions

Supplied in the meter packaging

Also available as Wireless - Part code **ZE112C5**

Battery powered only, 10 year battery life



**Elvaco Data collectors, GSM communication .
 Hard wired MBus input.**

Maximum	
8 heat meters	SY008DC
32 heat meters	SY032DC
64 heat meters	SY064DC
128 heat meters	SY250DC

**Elvaco Data collectors, GSM communication .
 Wireless MBus input.**

Maximum	
128 heat meters	SY500DC

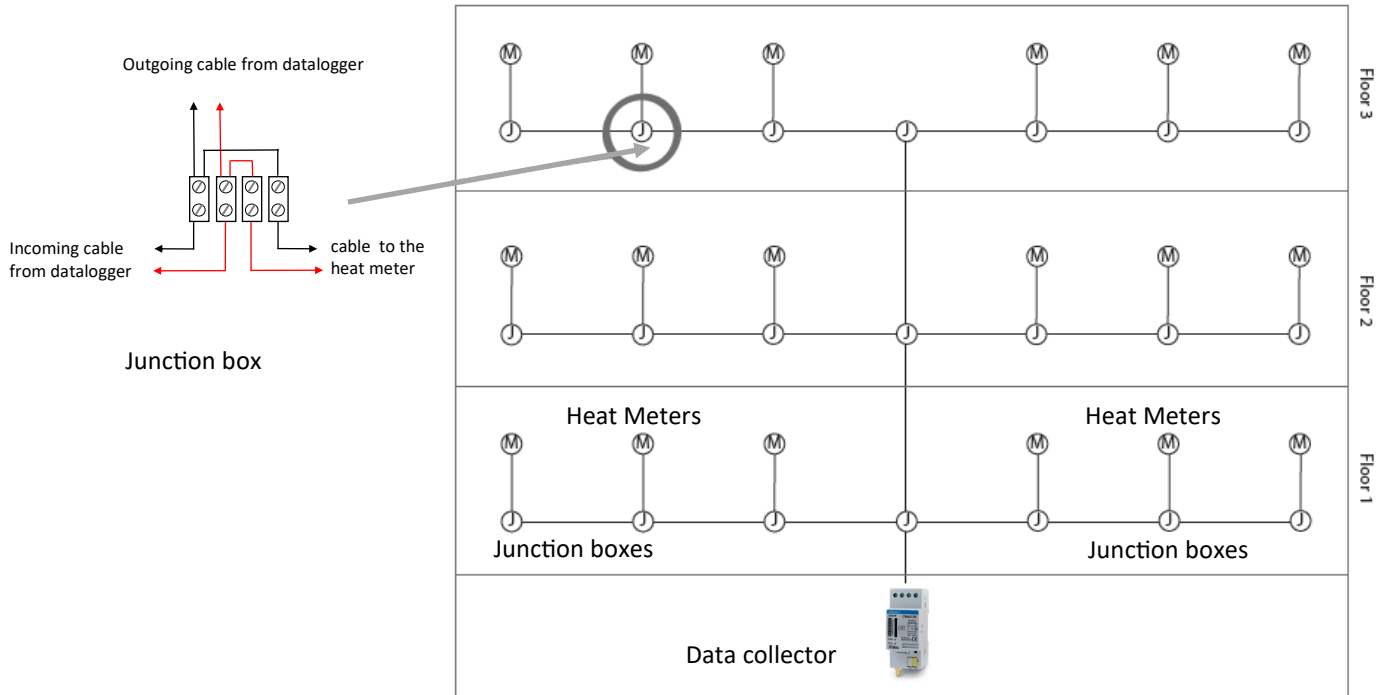
Wireless Mbus
 signal repeater **AP868WM**

Note, survey and report quoted per application
 Commissioning quoted per application

Heat Metering and M Bus



Example M-Bus wiring schematic
Schematic is for illustration purpose only.



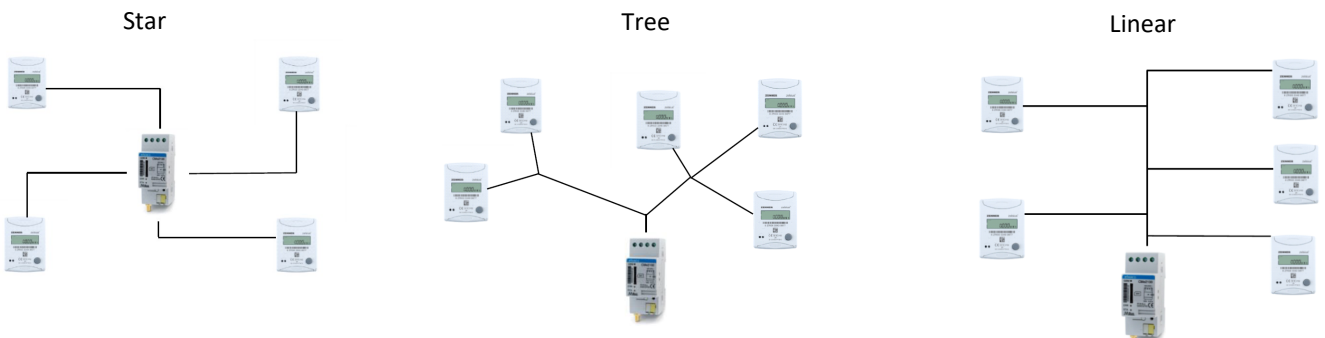
Schematics, drawings and example figures do not constitute an actual design, and each project should be reviewed individually as a unique design process.

M-Bus (Meter Bus) is a European standard for the remote reading of heat consumption by heat interface units. and was developed to fill the need for the networking and remote reading of utility meters. The M-bus interface is made for communication on two wires as the most cost effective solution, but a wireless version is also available.

The principle is based on a master - slave procedure, the master is the data logger, and the slave being the heat meter.

When interrogated, the meters deliver the data they have collected to the common master. Another method is to transmit meter readings vis GPRS or GSM. The data is then stored until required for billing. M-Bus cable is protected against reverse polarity, the wires are interchangeable.

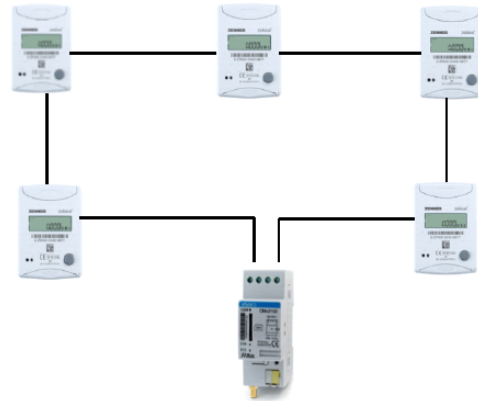
Wiring can be in these recommended topographies,



Ring method - DO NOT USE!

This method of connecting the heat meters is not to be used.

In this formation the weakness is that if one component fails, the entire system is out of operation.



For M-Bus wiring use two core no smaller than 2.5mm cable, and wire the heat meters as directly as possible avoiding excess cable. Label all the wiring and distribution and junction connection points. The maximum length of cable can be from 1000m to 4000m, and is dependant on the number of meters and the character of the cable, the lower the resistance the better. High resistance caused by using for example smaller cables, may lead to a risk of transmission errors. Up to 128 heat meters can be connected to a M-Bus network, (up to 250 when broadband connection used) and data loggers come in different sizes, so select the appropriate option. The more meters in connection, then the shorter the maximum cable length, and for 250 meters to one data logger then the total maximum length of cable is 1000m.

