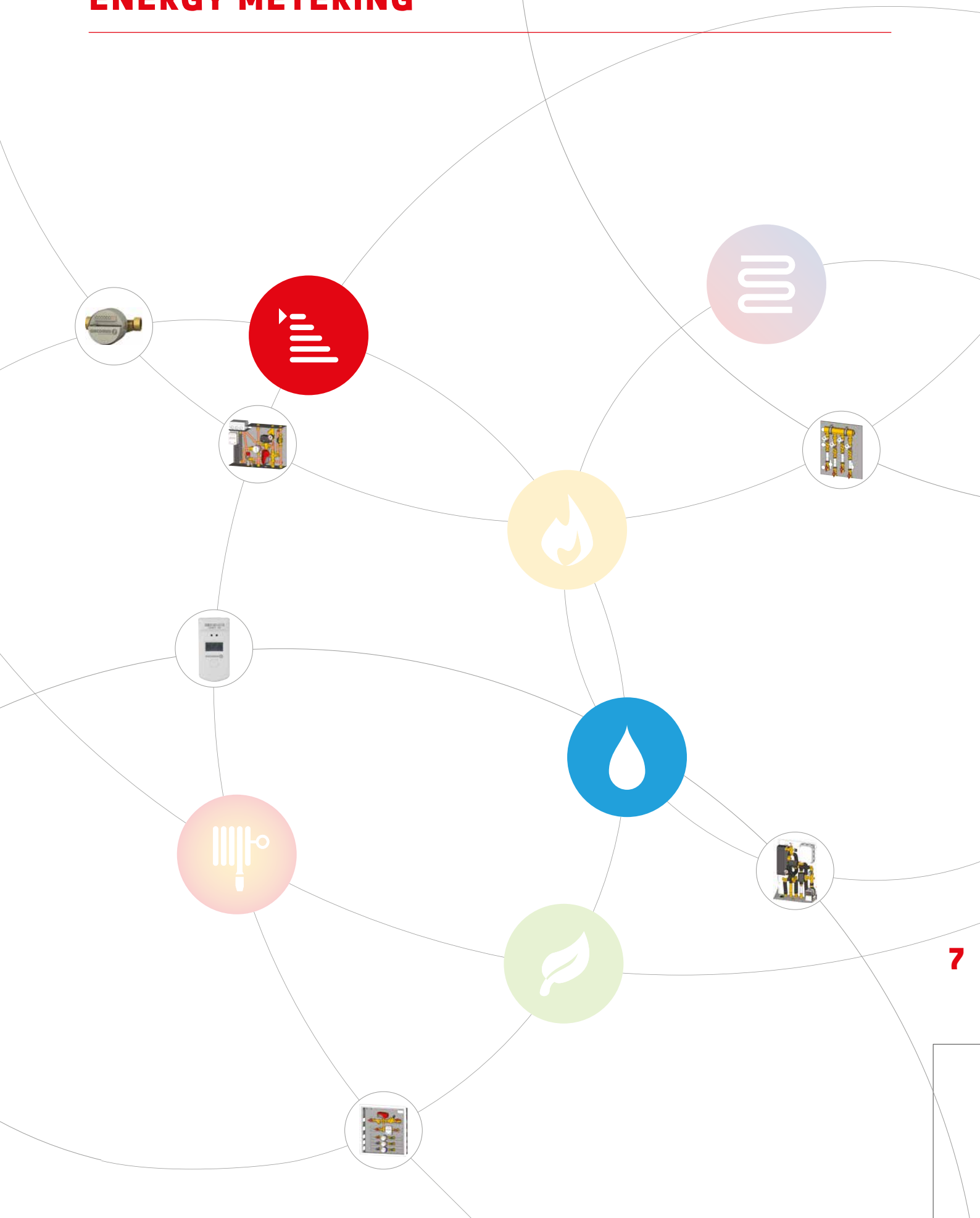
Chapter 7

# DIRECT AND INDIRECT THERMAL ENERGY METERING



# USER MODULES FOR DIRECT METERING

## GE555

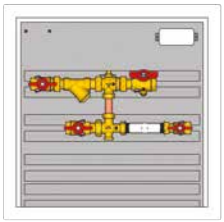
STANDARD

| PRODUCT CODE | CONNECTIONS | DIMENSIONS (L x H x D) mm | BALANCING | UNITS FOR SANITARY WATER METERS | | |
|---|---|---|---|---|---|---|
| **GE555Y461** | 3/4" | 500 x 500 x 110÷160 | only by-pass | 2 | 1 | - |
| **GE555Y462** | 3/4" | 600 x 600 x 110÷160 | static | 3 | 1 | - |
| **GE555Y463** | 1" | 600 x 600 x 110÷160 | static | 3 | 1 | - |
| **GE555Y468** | 3/4" | 600 x 600 x 110÷160 | dynamic | 3 | 1 | - |
| **GE555Y469** | 1" | 600 x 600 x 110÷160 | dynamic | 3 | 1 | - |
| **GE555Y472** | 3/4" | 600 x 600 x 145÷195 | only by-pass - with double delivery | 2 | 1 | - |

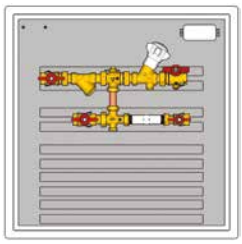
User module for centralized heating and/or cooling systems.
- Shut-off ball valves
- Motorizable zone valve
- Guide rails for installation of sanitary and/or service water metering units
- Plastic spacer for installation of thermal energy meter
- Box with terminal board for electric connections
- Housing for thermal energy meter delivery temperature probe, built into the shut-off valve
- Painted sheet metal cabinet (RAL9010) with lockable door and adjustable frame depth
- Fittings for connection and fixing
- Max. working temperature 110 °C (90 °C with plastic spacer)
- Max. working pressure 16 bar (10 bar with plastic spacer)

TO COMPLETE THE GE555 MODULE, THE FOLLOWING MAY BE ORDERED SEPARATELY:

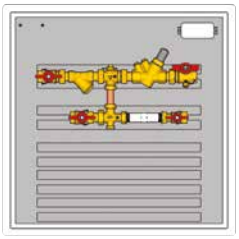
- Thermal energy meter, GE552 series
- Units for sanitary/service water, GE550 or GE550-1 series
- Actuator for commanding the zone valve, K270
- Insulation, GE551-4 series
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)



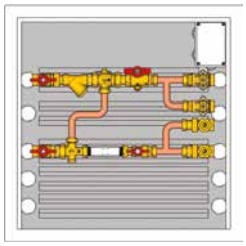
**GE555Y461**



**GE555Y462**
**GE555Y463**



**GE555Y468**
**GE555Y469**



**GE555Y472**

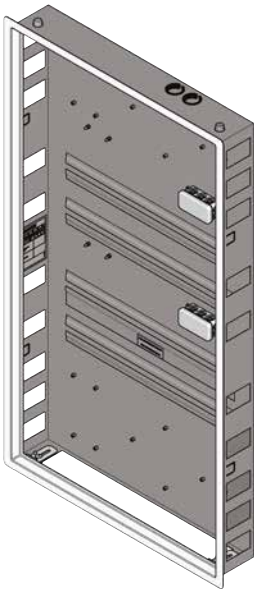
# GE555-2

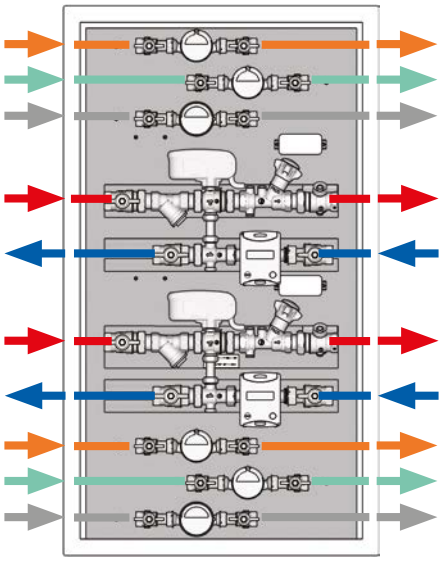
MULTIUSER MODULES

## FOR 2 APARTMENTS

| PRODUCT CODE | CONNECTIONS | N° OF APARTMENTS | ❐ | ⊞ |
|---|---|---|---|---|
| **GE551Y040** | 3/4" or 1" | 2 | 1 | - |

**GE551Y040 metal cabinet.**
**It can be used as a multiuser module for centralized heating and/or cooling systems.**
- Guide rails for installation of thermal energy metering units (maximum 2 outputs)
- Guide rails for installation of sanitary and/or service water metering units (maximum 6 outputs)
- Boxes with terminal boards for electrical connections
- Dimensions (L x H x D): 600 x 1100 x 110÷160 mm





FINISHING COMPONENTS, IN LIGHT GREY.

DELIVERY
RETURN
SANITARY HOT WATER
SANITARY COLD WATER
SERVICE WATER

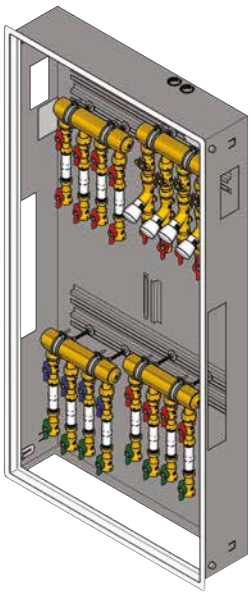
**FOR USE AS A MULTIUSER MODULE FOR 2 APARTMENTS, THE CABINET MUST BE FITTED WITH THE FOLLOWING COMPONENTS:**

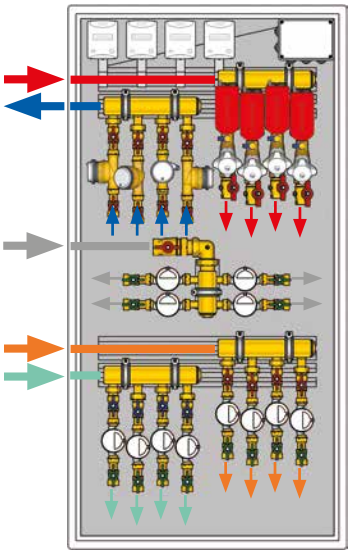
- Thermal energy metering units, GE550-2 series
- Thermal energy meters, GE552 series
- Units for sanitary/service water, GE550 series
- Actuator for commanding the zone valve, K270
- Insulation, GE551-4 series
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)

## FOR 3 or 4 APARTMENTS

| PRODUCT CODE | CONNECTIONS | N° OF APARTMENTS | ❐ | ⊞ |
|---|---|---|---|---|
| **GE555Y135** | 1 1/4" x 3/4" | 3 | 1 | - |
| **GE555Y136** | 1 1/4" x 3/4" | 4 | 1 | - |

**Multiuser module for centralized heating and/or cooling systems.**
- Thermal energy metering units (3 or 4 depending on codes)
- Sanitary metering units (3 or 4 depending on codes)
- Guide rails for installation of multiuser units (4 outputs) for service water
- Box with terminal board for electrical connections
- Dimensions (L x H x D): 750 x 1500 x 190 mm





FINISHING COMPONENTS, IN LIGHT GREY.

DELIVERY
RETURN
SANITARY HOT WATER
SANITARY COLD WATER
SERVICE WATER

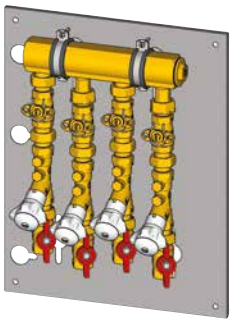
**TO COMPLETE THE MULTIUSER MODULE, THE FOLLOWING MAY BE ORDERED SEPARATELY:**

- Thermal energy meters, GE552 series
- Sanitary/service water meters, GE552-2 series
- Multiuser unit (4 outputs) for service water, code GE550Y148
- Actuator for commanding the zone valve, K270
- Insulation, GE551-4 series
- Components for M-Bus data centralization (GE552-4 series)

# GE550-3

## MULTIUSER UNITS OR MODULES

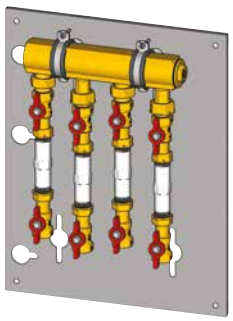
Delivery & return metering units.
- Shut-off ball valves
- Plastic spacer for installation of thermal energy meter (the thermal energy meter must be installed splitting the volumetric part from the display)
- Depending on the version, multiuser units for sanitary water, heating and/or cooling or universal metallic template units, are available
- Depending on the version, balancing valve units, motorizable zone valve, motorizable mixing valve, are available
- Max. working temperature 110 °C (90 °C with plastic spacer)
- Max. working pressure 16 bar (10 bar with plastic spacer)



**Delivery heating/cooling units.**
- Guides to move the position of the collars in vertical direction
- Zone valves (motorizable with K270 actuators)
- Static balancing valves
- Shut-off ball valves with housing for thermal energy meter delivery temperature probe
- Possibility of installation of the fifth zone (code GE550Y094)
- Frame dimensions (L x H x D): 390 x 495 x 160 mm

**GE550Y147**
**GE550Y117**

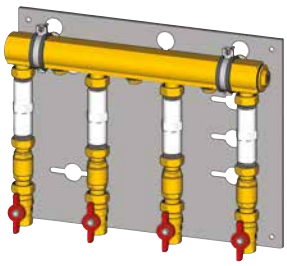
| PRODUCT CODE | CONNECTIONS | ZONES | | |
|---|---|---|---|---|
| **GE550Y147** | 1 1/4" x 3/4" | 4 | 1 | - |
| **GE550Y117** | 1 1/4" x 3/4" | 3 | 1 | - |



**Return heating/cooling units.**
- Guides to move the position of the collars in vertical direction
- Plastic spacer for installation of 3/4" thermal energy meters, GE552 series
- Shut-off ball valve
- Possibility of installation of the fifth zone (code GE550Y093)
- Frame dimensions (L x H x D): 390 x 495 x 110 mm

**GE550Y146**
**GE550Y116**

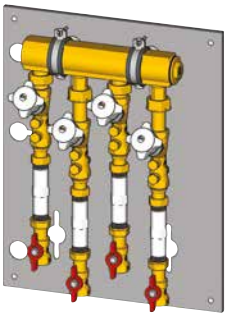
| PRODUCT CODE | CONNECTIONS | ZONES | | |
|---|---|---|---|---|
| **GE550Y146** | 1 1/4" x 3/4" | 4 | 1 | - |
| **GE550Y116** | 1 1/4" x 3/4" | 3 | 1 | - |



**Delivery heating/cooling units.**
- Guides to move the position of the collars in vertical direction
- Plastic spacer for installation of circulator 15/7
- Increased port check valves (size 1")
- Shut-off ball valves with housing for thermal energy meter delivery temperature probe
- Possibility of installation of the fifth zone (code GE550Y092)
- Frame dimensions (L x H x D): 495 x 390 x 115 mm

**GE550Y145**
**GE550Y115**

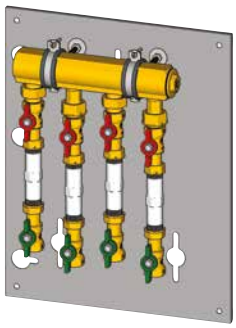
| PRODUCT CODE | CONNECTIONS | ZONES | | |
|---|---|---|---|---|
| **GE550Y145** | 1 1/4" x 3/4" | 4 | 1 | - |
| **GE550Y115** | 1 1/4" x 3/4" | 3 | 1 | - |



**Return heating/cooling units.**
- Guides to move the position of the collars in vertical direction
- Static balancing valves
- Plastic spacer for installation of 3/4" thermal energy meters, GE552 series
- Shut-off ball valve
- Possibility of installation of the fifth zone (code GE550Y091)
- Frame dimensions (L x H x D): 390 x 495 x 160 mm

**GE550Y144**
**GE550Y114**

| PRODUCT CODE | CONNECTIONS | ZONES | | |
|---|---|---|---|---|
| **GE550Y144** | 1 1/4" x 3/4" | 4 | 1 | - |
| **GE550Y114** | 1 1/4" x 3/4" | 3 | 1 | - |



**Sanitary water units.**
- Guides to move the position of the collars in vertical direction
- Plastic spacer for installation of 3/4" water meters, GE552-2 series
- Shut-off ball valves, upstream and downstream of the spacer
- Shut-off valves with check valves (green T-handle)
- Possibility of installation of the fifth zone (code GE550Y090)
- Frame dimensions (L x H x D): 390 x 495 x 160 mm.

**GE550Y112**
**GE550Y113**

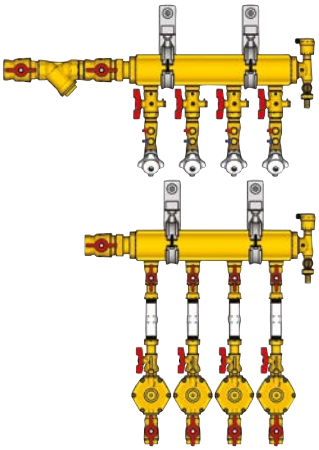
| PRODUCT CODE | CONNECTIONS | ZONES | | |
|---|---|---|---|---|
| **GE550Y112** | 1 1/4" x 3/4" | 4 | 1 | - |
| **GE550Y113** | 1 1/4" x 3/4" | 3 | 1 | - |

**Universal multiuser metallic frame.**
- Metallic frame with insulated manifold (size 1 1/4" x 3/4")
- 2÷4 zones with 3/4" units GE550, GE550-1 or GE550-2 series
- 2÷4 heating/cooling/sanitary zones
- Frame dimensions (L x H x D): 400 x 495 x 140 mm

NOTE
For the manifold-units connection, please order separately the fittings R189DY004

**GE550Y149**

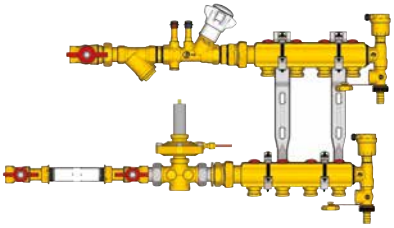
| PRODUCT CODE | CONNECTIONS | ZONES | | |
|---|---|---|---|---|
| **GE550Y149** | 1 1/4" x 3/4" | 2÷4 | 1 | - |



**Multiuser heating/cooling module.**
- Filter
- Static balancing valve on the delivery outputs
- Differential pressure controller on the return outputs
- Plastic spacer on the return outputs, for installation of GE552 thermal energy meters
- Distribution manifolds with automatic air vent and drain tap
- Delivery module dimensions (L x H x D): 750÷950 x 415 x 310 mm
- Return module dimensions (L x H x D): 555÷755 x 640 x 310 mm

## GE550Y172-3-4-5-6

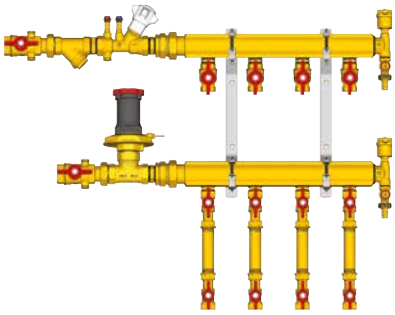
| PRODUCT CODE | CONNECTIONS | MANIFOLDS OUTPUTS | DELIVERY MODULE LENGHT mm | RETURN MODULE LENGHT mm | ❐ | ▦ |
|---|---|---|---|---|---|---|
| **GE550Y172** | 1 1/4" x 3/4" | 2 | 750 | 555 | 1 | - |
| **GE550Y173** | 1 1/4" x 3/4" | 3 | 750 | 555 | 1 | - |
| **GE550Y174** | 1 1/4" x 3/4" | 4 | 750 | 555 | 1 | - |
| **GE550Y175** | 1 1/4" x 3/4" | 5 | 850 | 655 | 1 | - |
| **GE550Y176** | 1 1/4" x 3/4" | 6 | 950 | 755 | 1 | - |



**Multiuser heating/cooling module.**
- Filter
- Static balancing valve
- Differential pressure controller
- Plastic spacer for installation of GE552 thermal energy meter
- Distribution manifolds with automatic air vent and drain tap
- Dimensions (L x H x D): 585÷785 x 390 x 110 mm

## GE550Y192-3-4-5-6

| PRODUCT CODE | CONNECTIONS | MANIFOLDS OUTPUTS | LENGHT mm | ❐ | ▦ |
|---|---|---|---|---|---|
| **GE550Y192** | 3/4" x base 18 | 2 | 585 | 1 | - |
| **GE550Y193** | 3/4" x base 18 | 3 | 635 | 1 | - |
| **GE550Y194** | 3/4" x base 18 | 4 | 685 | 1 | - |
| **GE550Y195** | 3/4" x base 18 | 5 | 735 | 1 | - |
| **GE550Y196** | 3/4" x base 18 | 6 | 785 | 1 | - |



**Multiuser heating/cooling module.**
- Filter
- Static balancing valve
- Differential pressure controller
- Brass spacer on the return outputs, for installation of GE552 thermal energy meters
- Distribution manifolds with automatic air vent and drain tap
- Dimensions (L x H x D): 625÷1100 x 660 x 120 mm

## GE553Y132-3-4-5-6
## GE553Y232-3-4-5-6

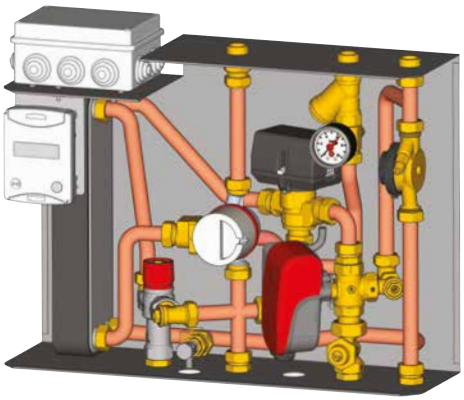
| PRODUCT CODE | CONNECTIONS | MANIFOLDS OUTPUTS | LENGHT mm | ❐ | ▦ |
|---|---|---|---|---|---|
| **GE553Y132** | 1" x 3/4" | 2 | 630 | 1 | - |
| **GE553Y133** | 1" x 3/4" | 3 | 730 | 1 | - |
| **GE553Y134** | 1" x 3/4" | 4 | 830 | 1 | - |
| **GE553Y135** | 1" x 3/4" | 5 | 930 | 1 | - |
| **GE553Y136** | 1" x 3/4" | 6 | 1030 | 1 | - |
| **GE553Y232** | 1 1/4" x 3/4" | 2 | 700 | 1 | - |
| **GE553Y233** | 1 1/4" x 3/4" | 3 | 800 | 1 | - |
| **GE553Y234** | 1 1/4" x 3/4" | 4 | 900 | 1 | - |
| **GE553Y235** | 1 1/4" x 3/4" | 5 | 1000 | 1 | - |
| **GE553Y236** | 1 1/4" x 3/4" | 6 | 1100 | 1 | - |

# USER SATELLITES FOR DIRECT METERING

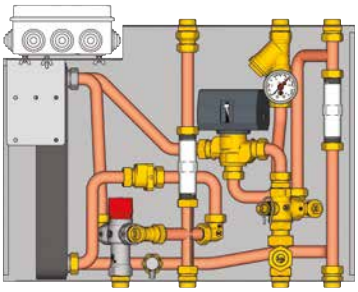
## GE556

STANDARD

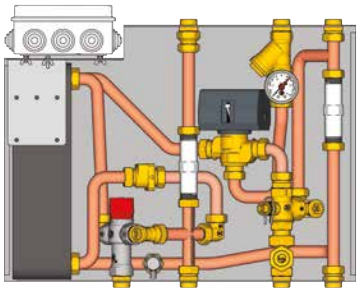
| PRODUCT CODE | CONNECTIONS | MAIN FEATURES | POWER EXCHANGER | | |
|---|---|---|---|---|---|
| **GE556Y301** | 3/4″ | priority valve | 44 kW | 1 | - |
| **GE556Y302** | 3/4″ | priority valve | 58 kW | 1 | - |
| **GE556Y303** | 3/4″ | thermostatic control and dynamic balancing | 58 kW | 1 | - |
| **GE556Y314** | 3/4″ | softened water management | 44 kW | 1 | - |



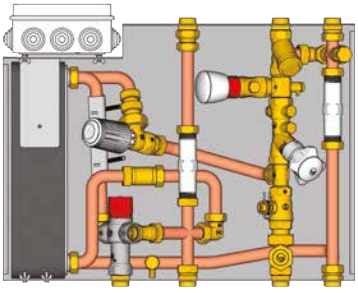
User satellite for centralized systems, for managing heating and hot sanitary water production.
- Heat exchanger for instantaneous production of sanitary hot water
- Filter and housing for delivery temperature probe, on the primary side
- Motorizable zone valve and lockshield valve for static balancing, on the heating side
- Pre-arrangement for housing the satellite inside a metallic template fitted with shut-off valves
- Plastic spacers for installation of thermal energy meter and sanitary water meter
- Box with terminal board for electric connections
- Fittings for connection and fixing
- Max. working temperature: 90 °C
- Max. working pressure: 16 bar (10 bar with plastic spacer)
- Dimensions (L x H x D): 540 x 390 x 155 mm



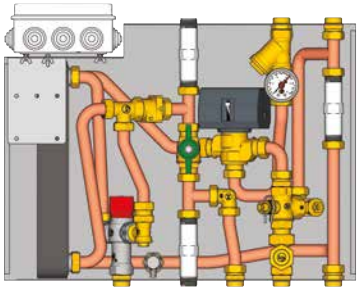
**GE556Y301**



**GE556Y302**



**GE556Y303**



**GE556Y314**

**TO COMPLETE THE GE556 SATELLITE, THE FOLLOWING MAY BE ORDERED SEPARATELY:**

- Thermal energy meter, GE552 series
- Sanitary water meter, GE552-2 series
- Actuator for commanding the zone valve, K270
- Template for installation in building site
- Additional valve kit (only for GE556Y314)
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)

**FOR ALL THE VERSIONS, THE EXCHANGER POWER REFERS TO THE FOLLOWING OPERATION CONDITIONS:**

- Primary side 75 °C, flow rate 1 $m^3$/h
- Secondary side 15-50 °C, 18 l/min (24 l/min for GE556Y302, GE556Y303)

**FOR THE VERSIONS WITH BIG EXCHANGER (GE556Y302, GE556Y303), THE POWER CAN BE CONSIDERED EQUAL TO 44KW TO THE FOLLOWING OPERATING CONDITIONS:**

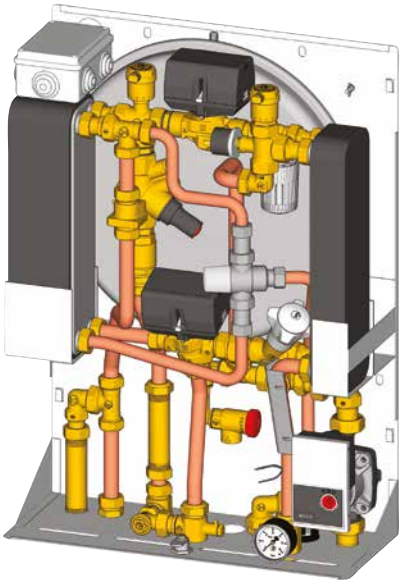
- Primary side 65 °C, flow rate 1 $m^3$/h
- Secondary side 15-50°C, 18 l/min

# GE556-1

## DOUBLE HEAT EXCHANGER

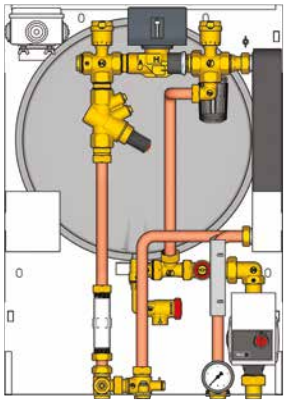
| PRODUCT CODE | CONNECTIONS | MAIN FEATURES | HEAT EXCHANGER POWER | TEMPLATES | | |
|---|---|---|---|---|---|---|
| **GE556Y171** | 3/4" | Heating | 17,4 kW | GE551Y081 | 1 | - |
| **GE556Y176** | 3/4" | Heating / Sanitary water production | 17,4 kW / 56 kW | GE551Y082 | 1 | - |
| **GE556Y177** | 3/4" | Heating / Sanitary water production | 17,4 kW / 67 kW | GE551Y082 | 1 | - |

Satellite with a double heat exchanger, for centralized systems for high and low temperature heating and production of sanitary hot water (only for GE556Y176-Y177).
- Heat exchanger to separate the secondary heating circuit from the primary circuit of the condominium
- Heat exchanger for the instantaneous production of sanitary hot water (except GE556Y171)
- Self-regulating circulator, which conforms to directive ErP (2009/125/EC), expansion tank, safety valve, manometer, pressure switch, automatic air vent valve, on heating side
- Thermostatic control of the heating temperature (possibility of high and low temperature)
- Automated zone valve, on heating side
- Priority control in the production of sanitary hot water (except GE556Y171)
- TMV2+TMV3+WRAS-certified anti-scalding thermostatic mixer (except GE556Y171)
- Adjustable by-pass, dynamic balancing valve, primary side (except for the by-pass, there is no primary flow when the satellite is not active), automatic air vent
- Pre-arrangement for housing the satellite inside a metallic template fitted with shut-off valves
- Brass spacers for installation of thermal energy meter and sanitary water meter
- Box with terminal board for electric connections
- Max. working temperature: 90 °C
- Max. working pressure: 16 bar
- Dimension (L x H x D): 450 x 630 x 180 mm

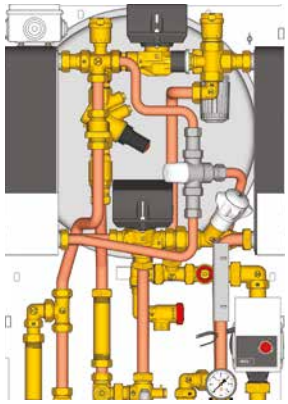


TO COMPLETE THE GE556-1 SATELLITE, THE FOLLOWING MAY BE ORDERED SEPARATELY:

- Thermal energy meter, GE552 series
- Sanitary water meter, GE552-2 series
- Actuator for commanding the zone valve, K270
- Template for installation in building site
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)



**GE556Y171**

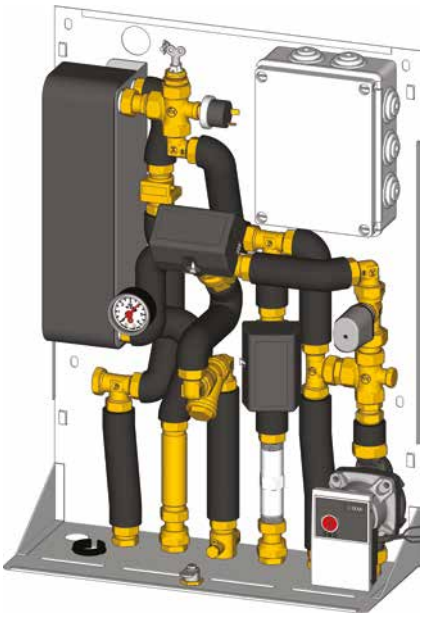


**GE556Y176**
**GE556Y177**

# GE556-2

## ELECTRONIC REGULATION

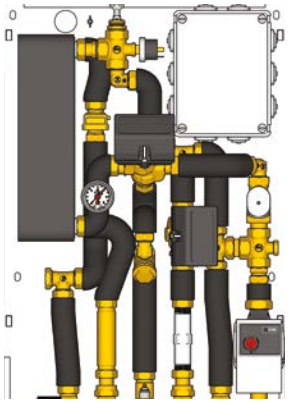
| PRODUCT CODE | CONNECTIONS | MAIN FEATURES | EXCHANGER POWER | TEMPLATE | ❐ | ⊞ |
|---|---|---|---|---|---|---|
| **GE556Y401** | 3/4″ | Heating / Sanitary water production | 58 kW | GE551Y074 | 1 | - |
| **GE556Y402** | 3/4″ | Heating / Sanitary water production | 67 kW | GE551Y074 | 1 | - |



High-efficiency electronic user satellite for centralized systems, for managing high/low temperature heating and hot sanitary water production.
- Heat exchanger for the instantaneous production of sanitary hot water
- Flow switch for sanitary hot water priority command
- Three-way motorized diverting valve
- Two-way motorized mixing valve
- Self-modulating circulator complying with ErP Directive (2009/125/EC)
- Filter and manual air-vent valve on primary side
- Adjustable by-pass and static balancing lockshield valve on heating side
- Thermal safety valve on heating side
- Safety pressure switch for low pressure
- Fully insulated pipes
- Electronic thermoregulation unit with fixed point (SET POINT) for managing the sanitary hot water temperature and the climatic heating curve, with external probe support (optional)
- Remote command for parameter management, with visualisation display
- Sanitary hot water temperature control probes (heating and primary return)
- Box with terminal board for electric connections
- Brass and plastic spacers for installation of thermal energy meter and sanitary water meter
- Energy savings: reduction of the flow rate requested from the primary line, and reduction of the primary return temperatures
- Heating temperature range: low temperature: 25÷45 °C / high temperature: 25÷85 °C
- Sanitary hot water temperature range: 30÷60 °C (SET-POINT 48 °C)
- Max. working temperature: 90 °C
- Max. working pressure: 6 bar
- Dimensions (L x H x D): 450 x 630 x 180 mm

**TO COMPLETE THE GE556-2 SATELLITE, THE FOLLOWING MAY BE ORDERED SEPARATELY:**

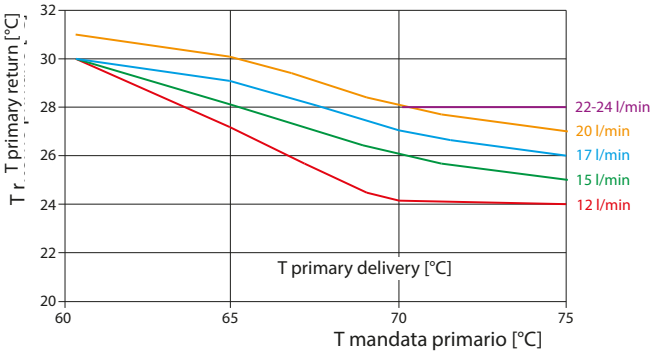
- Thermal energy meter, GE552 series
- Sanitary water meter, GE552-2 series
- Templates for installation in building site
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)



**GE556Y401**
**GE556Y402**


**K480Y002**
Thermostat with remote command. Provided with the satellite.

**Energy saving features**
Low return temperatures of primary side, in heating operation

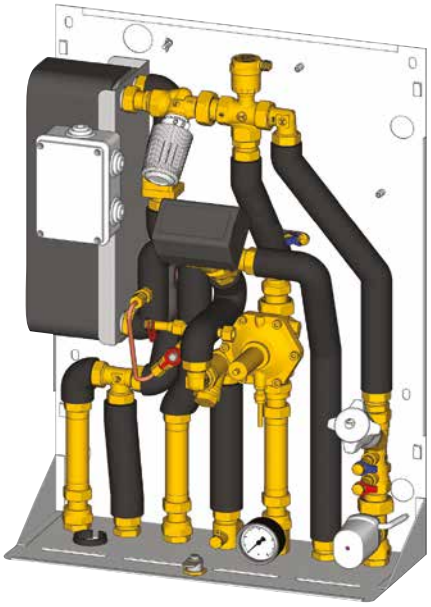


# GE556-4

## WITH DIFFERENTIAL PRESSURE CONTROL VALVE

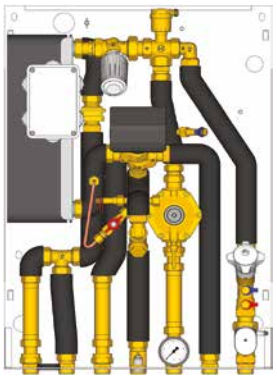
| CODE | CONNECTIONS | MAIN FUNCTIONS | EXCHANGER POWER | TEMPLATE | | |
|---|---|---|---|---|---|---|
| **GE556Y320** | 3/4" | High temperature heating/ Sanitary water production | 56 kW | GE551Y075 | 1 | - |
| **GE556Y321** | 3/4" | High temperature heating/ Sanitary water production | 67 kW | GE551Y075 | 1 | - |
| **GE556Y322** | 3/4" | Low temperature heating/ Sanitary water production | 56 kW | GE551Y075 | 1 | - |
| **GE556Y323** | 3/4" | Low temperature heating/ Sanitary water production | 67 kW | GE551Y075 | 1 | - |

User satellite for centralized systems, for managing high/low temperature heating and hot sanitary water production.
- Heat exchanger for instantaneous production of sanitary hot water
- Flow switch for sanitary hot water priority control
- Motorized three-way diverting valve
- Self-modulating circulator complying with Directive ErP 2009/125/EC (only for GE556Y322-323)
- Static balancing valve (only for GE556Y320-321)
- Thermostatic valve for adjusting the sanitary hot water and heating temperature
- By-pass on the sanitary primary side to keep the exchanger warm
- Automatic air vent valve with hygroscopic gasket, filter and manometer on the primary side
- Safety pressure switch for low pressure on the primary side (only for GE556Y322-323)
- Differential pressure control valve on the primary side
- Safety valve with electrical actuator on the heating side
- Box with terminal board for electric connections
- Brass spacers for installation of thermal energy meter and sanitary water meter
- Max. working temperature: 90 °C
- Max. working pressure: 6 bar (for low temp. versions); 16 bar (for high temp. versions)
- Dimensions (L x H x D): 450 x 630 x 180 mm

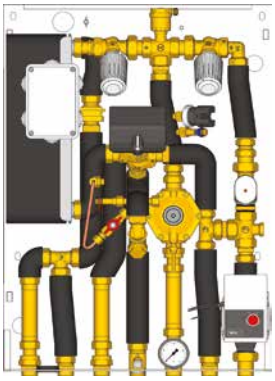


TO COMPLETE THE GE556-4 SATELLITE, THE FOLLOWING MAY BE ORDERED SEPARATELY:

- Thermal energy meter, GE552 series
- Sanitary water meter, GE552-2 series
- Templates for installation in building site
- Components for M-Bus data centralization (GE552-4 series), or Wireless M-Bus data centralization (GE552-W series)



**GE556Y320**
**GE556Y321**



**GE556Y322**
**GE556Y323**

# THERMAL ENERGY METERS, WATER METERS, DATA CENTRALIZATION SYSTEMS

## GE552

**THERMAL ENERGY METERS**

| PRODUCT CODE | CONNECTIONS | NOMINAL FLOW-RATE m³/h | NOMINAL FLOW-RATE m³/h | SUPPLY | DISTANCE mm | DATA CENTRALIZATION TYPE | | |
|---|---|---|---|---|---|---|---|---|
| **GE552Y215** | 3/4" | 0,6 | 1,2 | battery | 110 | M-Bus / Wireless M-Bus | 1 | - |
| **GE552Y216** | 3/4" | 1,5 | 3,0 | battery | 110 | M-Bus / Wireless M-Bus | 1 | - |
| **GE552Y217** | 1" | 2,5 | 5,0 | battery | 130 | M-Bus / Wireless M-Bus | 1 | - |

Volumetric thermal energy meters with double register,
for measuring heating and/or cooling consumption.
- Electronic processing unit
- Flow rate measuring section
- Impulsive inputs for sanitary water meters
- Two water temperature probes (delivery and return)
- Max. working temperature 90 °C
- Max. working pressure 16 bar
- Arranged for data communication in accordance with M-BUS EN1434
  or Wireless M-BUS EN13757 (by GE552Y027 board)
- EC marks
- Certified in accordance with MID Directive 2004/22/EC

**GE552Y215**
**GE552Y216**
**GE552Y217**

## GE552-2

**SANITARY WATER METERS**

| PRODUCT CODE | CONNECTIONS | SANITARY WATER TYPE | NOMINAL FLOW-RATE Qn m³/h | PERMANENT FLOW-RATE Q3 m³/h | MAX. WATER TEMPERATURE °C | CENTRE DISTANCE mm | DATA CENTRALIZATION TYPE | | |
|---|---|---|---|---|---|---|---|---|---|
| **GE552Y190** | 3/4" | cold | - | 2,5 | 30 | 110 | M-Bus | 1 | - |
| **GE552Y191** | 3/4" | hot | - | 2,5 | 90 | 110 | M-Bus | 1 | - |

Sanitary water meters, for measuring the consumption of sanitary hot and cold water.
- Measurement section of the flow and circular dial
- Max. working temperature: 30 °C for sanitary cold water
  90 °C for sanitary hot water
- Max. working pressure 10 bar
- Arranged for data communication in accordance with M-BUS EN1434
- EC marking
- Certified in accordance with MID Directive 2004/22/EC


**GE552Y190**
**GE552Y191**

# GE552-4

## M-BUS CENTRALISATION

The new M-bus modular centralization system comprises two solutions and allows to place the various devices in series expanding the reading possibility from 60 to 250 devices.

The **standard solution** is to use a local M-Bus concentrator that supports up to 60 devices and allows the on-site consultation and acquisition of data on the PC through a special software and USB cable. Up to 4 local concentrators can be placed in series and therefore up to 240 devices managed.

The **complete solution** consists of a datalogger with integrated web server that supports up to 4 local concentrators expanding the network to 250 devices.

Advantages:
- The integrated web server allows the set-up, the search and the consultation of data from all the devices that make up the M-Bus network directly on the display of the device
- Through a dial-up router all data can be managed and viewed on a PC or smartphone
- Management of alarms due to failure, tampering or the exceeding of configurable thresholds with the sending of email notifications
- Scheduling for the generation and forwarding of reports on the data gathered

### Local concentrator

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y050** | 1 | - |
| **GE552Y056** * | 1 | - |

Local concentrator for the collection, processing and recording of data originated from the M-Bus network. Capable of managing up to 60 devices.
To be used with the software for data acquisition GE556Y056.

* The code refers to no. 1 user license.

### Datalogger with web server

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y051** | 1 | - |

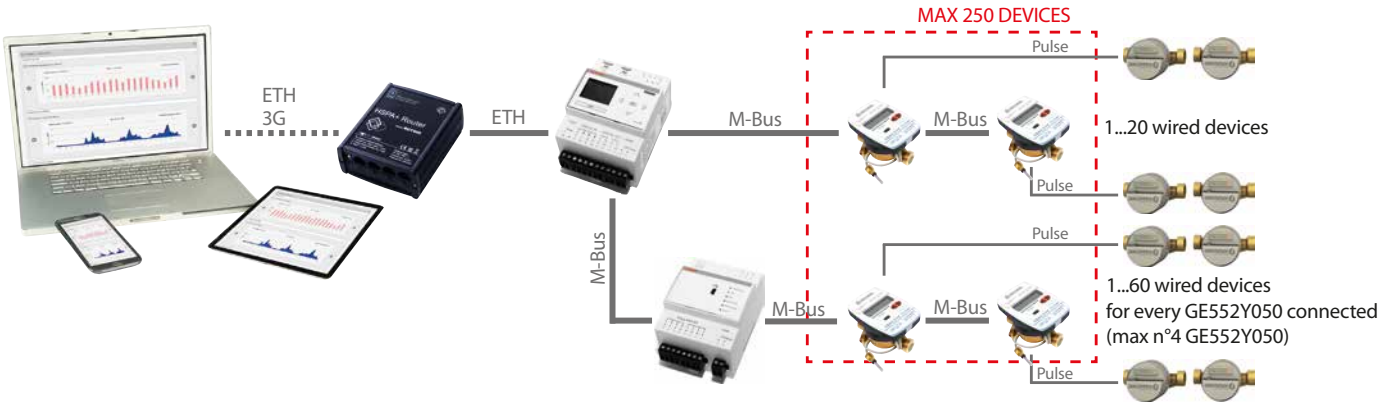
M-Bus datalogger for the collection, processing and recording of data originating from local GE552Y050 concentrators (max. 4 concentrators).
Can manage directly up to 20 devices and expands the M-Bus network up to 250 devices.

### Modem router

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y055** | 1 | - |

3G/EDGE/GPRS wireless modem router for remote connection of GE552Y051 or GE552Y052 datalogger.

## SAMPLE SCHEME



# GE552-4

## M-BUS CENTRALISATION

### M-Bus central unit, 20 addresses.

PRODUCT CODE | ❐ | ⊞
**GE552Y006** * | 1 | -

Manages up to 20 devices.

* Last in production

### M-Bus central unit, 60 addresses.

PRODUCT CODE | ❐ | ⊞
**GE552Y007** * | 1 | -

Manages up to 60 devices.

* Last in production

### M-Bus central unit, 120 addresses.

PRODUCT CODE | ❐ | ⊞
**GE552Y008** * | 1 | -

Manages up to 120 devices.

* Last in production

### M-Bus central unit, 250 addresses.

PRODUCT CODE | ❐ | ⊞
**GE552Y010** * | 1 | -

Manages up to 250 devices.

* Last in production

### GSM modem for remote control of consumption data.

PRODUCT CODE | ❐ | ⊞
**GE552Y041** * | 1 | -

Allows the remote control of the consumption data centralized using the M-Bus.

* Last in production

### Analogue modem.

PRODUCT CODE | ❐ | ⊞
**GE552Y042** * | 1 | -

Modem to be connected to the M-Bus control units.
Being analogue, the modem requires a traditional telephone line.

* Last in production

### Software for the M-Bus control unit.

PRODUCT CODE | ❐ | ⊞
**GE552Y033** * | 1 | -

Software for local or remote download of the consumption file through the PC.

* Last in production

### M-Bus module for the thermal energy meters

PRODUCT CODE | ❐ | ⊞
**GE552Y027** | 1 | -

For installation on the thermal energy meter dial GE552Y215, GE552Y216, GE552Y217.

# GE552-W

## WIRELESS M-BUS CENTRALISATION

The wireless M-Bus (868 MHz) centralization complies with the standard EN 13757. The consumption data may be sent **remotely** or in **walk-by mode**.

## REMOTE MODE

The **new modular** M-Bus Wireless centralization system is composed of a datalogger GE552Y052 (with integrated web server) and radio signal repeater antennae GE552Y053. The system allows:
- connecting in series the various wired and wireless devices, extending the reading capacity up to 500 devices.
- directly managing 500 wireless devices or 20 wired devices and 480 wireless.

The number of wired devices may be extended to 250, connecting more local concentrators GE552Y050 to the GE552Y052 datalogger, maintaining the possibility to manage up to 250 wireless devices.

Advantages:
- The integrated web server allows the set-up, the search and the consultation of data from all the devices that make up the M-Bus/M-Bus wireless network directly on the display of the device
- Through a dial-up router all data can be managed and viewed on a PC or smartphone
- Management of alarms due to failure, tampering or the exceeding of configurable thresholds with the sending of email notifications
- Scheduling for the generation and forwarding of reports on the data gathered

### Wireless datalogger

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y052** | 1 | - |

Wireless M-Bus/M-Bus datalogger for acquisition, processing and registration of data from wired or wireless M-Bus devices.
Manages directly up to 500 wireless devices and 20 wired devices.

### Wireless signal repeater antenna

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y053** | 1 | - |

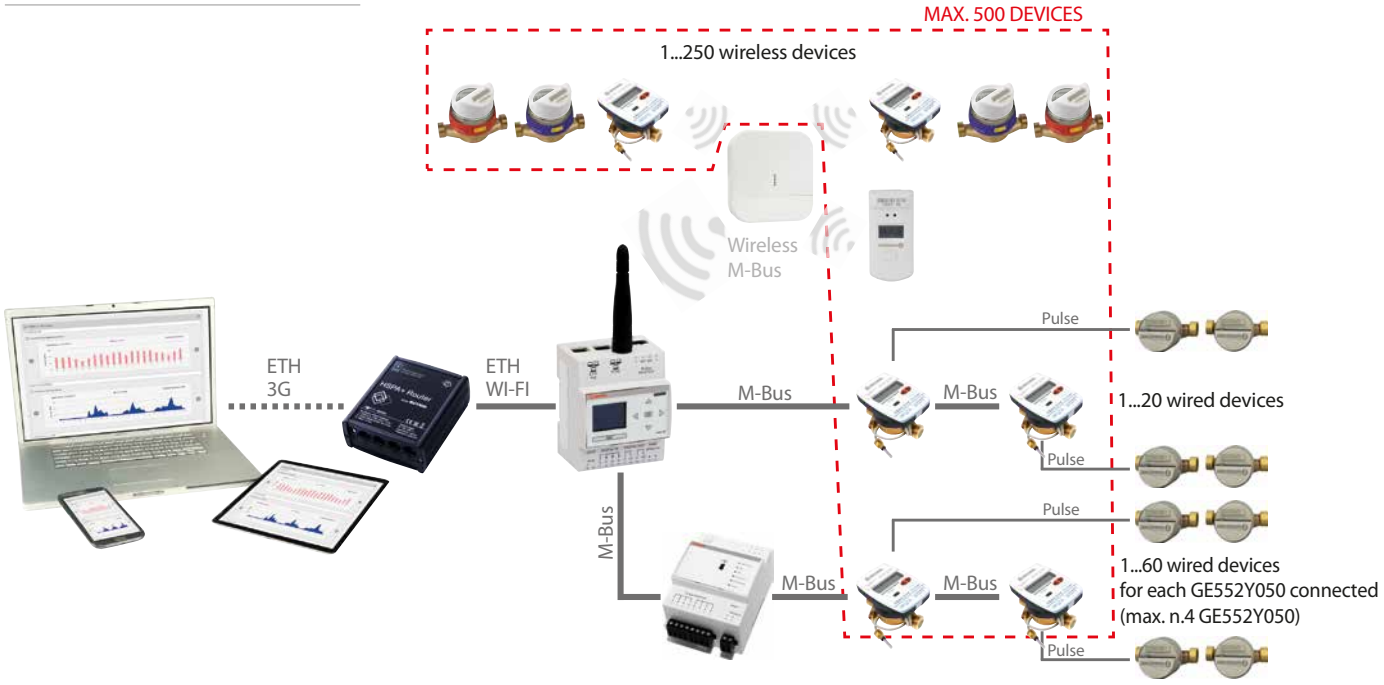
Wireless repeater and concentrator to extend the radio flow rate of the devices and for data transmission to the GE552Y052 datalogger.

### Modem router

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y055** | 1 | - |

3G/EDGE/GPRS wireless modem router for remote connection of GE552Y051 or GE552Y052 datalogger.

## SAMPLE SCHEME



The **other** remote data centralization system is composed of a concentrator GE552Y044 and signal repeaters GE552Y045, if necessary.
The system allows:
- the remote transmission of read data to programmable e-mail addresses
- the remote transmission of the data to a PC, via the GSM/GPRS network
- the local downloading of data to a PC (connected via the USB port)

### Wireless data concentrator and transmitter

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y044** * | 1 | - |

Manages up to 300 devices. Sends the consumption data through e-mail, GSM/GPRS, USB (connection to a PC). Equipped with configuration software. Battery-powered.

* Last in production

### Wireless signal repeater

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y045** * | 1 | - |

Increases the transmission distance for the wireless devices. Battery-powered.

* Last in production

### Software for wireless data centralisation.

| PRODUCT CODE | MISURA | | |
|---|---|---|---|
| **GE552Y034** * | for water meter | 1 | - |
| **GE552Y035** * | for energy meters | 1 | - |
| **GE700Y151** * | for heat cost allocators | 1 | - |
| **GESWY001** | for all devices | 1 | - |

The software can be used to configure and easily manage the wireless metering system.

The codes refers to no. 1 user license.

* Last in production

## WALK-BY MODE

Data sent to a PC, received by antenna GE552Y043 connected to USB port.

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y043** | 1 | - |

Wireless data receiver for devices installed on the installation (heat cost allocators, wireless modules for meters). Can be connected to PC via USB port. Flow rate up to 400 m.

The operation is provided by the same software GESWY001 used for heat cost allocators programming.

## WIRELESS DEVICES FO WIRELESS METERS

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y027** | 1 | - |

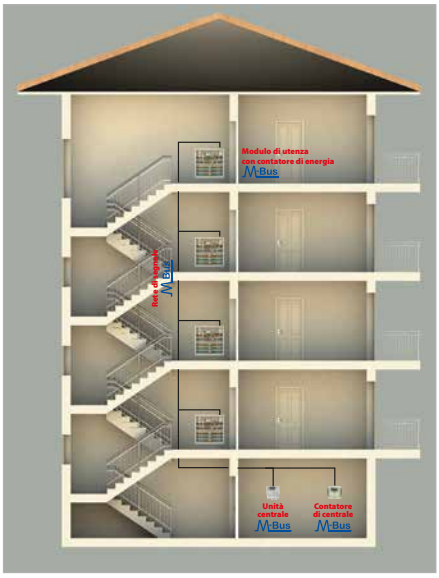
For installation on the thermal energy meter dial GE552Y215, GE552Y216, GE552Y217.

## GE500

| PRODUCT CODE | CHARACTERISTICS | | |
|---|---|---|---|
| **GE500Y401** | brass | 1 | - |
| **GE500Y402** | plastic | 1 | - |

Probe-support replacement kit M10 x 1 mm for energy meters.

# DATA CENTRALIZATION WITH M-BUS




The European Parliament and Council of the European Union have adopted Directive 2004/22/CE* concerning measurement instruments (MID – Measurement Instrument Directive): it sets the requirements for a set of devices and measurement systems in order to be marketed and operated in UE countries. This directive was acknowledge in Italy with Decreto Legislativo 2nd February 2007 n. 22**.

All measurement devices used in GE555 modules and GE556 satellites comply with MID European Directive.

*) "2004/22/CE Directive of European Parliament and Council of 31st March 2004 concerning measurement instruments", Official Journal of the European Union n. L 135 of 30th April 2004.
**) "Implementation of 2004/22/CE directive concerning measurement instruments", Official Journal n. 64 of 17th March 2007.

# COMPLIANCE WITH MID DIRECTIVE (2004/22/CE)

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

EG-Baumusterprüfbescheinigung
*EC type-examination certificate*

| | |
|---|---|
| Ausgestellt für: | Zenner International GmbH & Co. KG<br>Römerstadt 4<br>66121 Saarbrücken |
| Rechtsbezug: | *Richtlinie 2004/22/EG des Europäischen Parlaments und des Rates vom 31. März 2004 über Messgeräte (ABl. L 135 S. 1), umgesetzt durch die Vierte Verordnung zur Änderung der Eichordnung vom 8. Februar 2007 (BGBl. I S. 70)*<br>*Directive 2004/22/EC of the European Parliament and of the Council of 31 March 2004 on measuring instruments (OJ L 135 p. 1), implemented by the Fourth Ordinance for amending the Verification Ordinance dated 8 February 2007 (Federal Law Gazette I. p. 70).* |
| Geräteart: | Wärmezähler |
| Typbezeichnung: | Baureihe Zenner zelsius |
| Prüfbescheinigungs-Nr: | DE-07-MI004-PTB008 |
| Gültig bis: | 23.04.2017 |
| Anzahl der Seiten: | 15 |
| Geschäftszeichen: | PTB-7.6-4024345 |
| Benannte Stelle: | 0102 |
| Ausstellungsdatum: | 23.04.2007 |

Genehmigt durch PTB-Zertifizierungsstelle für Messgeräte: Im Auftrag — Siegel — Dr. Harry Stolz

Bearbeitet durch PTB-Fachbereich: 7.6 Im Auftrag — Dr. Jürgen Rose

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The use of measurement instruments suitable for the recording of consumption data is particularly important for the aspects that involves, as the consumer and environment protection, the fair expense sharing out, the imposition of taxes or the correctness of the commercial transactions. For this reason, the Countries of the European Union have acknowledged MID Directive (2004/22/CE) that defines the requirements to which the measurement instruments shall comply with to be marketed or started.

The range of Giacomini's modules and user satellites includes exclusively measurement devices complying with the Directive, as attested on them by the presence of the MID metrological marking close by the CE marking.

# METROLOGICAL MARKING


Compliance of measurement devices with all provisions of D.Lgs. 2nd February 2007 n.22 is certified by the presence, on them, of CE marking and of metrology marking composed of letter "M" and of the last two digits of the year of production.

# OMS: OPEN METERING SYSTEM

The Open Metering System (OMS) is the only specification in Europe intended to integrate the instruments for measuring various elements, to guarantee their interoperability and future operation. The water and heat meters and the heat cost allocators using an open communication standard are interchangeable regardless of the producer and guarantee maximum safety and data protection levels.

# INDIRECT METERING (HEAT COST ALLOCATORS)

The metering of thermal consumption using the GE700 electronic heat cost allocator system allows reorganizing radiator systems with centralized production and rising column distribution, making them more modern and appropriate for the times. In addition to the comfort and energy saving provided by individual thermoregulation using thermostatic heads and valves, it is possible to divide the cost of heating on the basis of the actual consumption, with a criterion of greater equity with respect to the traditional criteria of subdividing.
A radiator system that is reorganized with metering and thermoregulation also encourages more responsible, individual behaviour towards energy use. By paying for what they actually consume, each user is motivated to eliminate waste and to regulate the temperature inside the rooms of his house, on the basis of his actual need.
No longer will rooms be unnecessarily overheated, with the windows open, which will be a great benefit for the environment and for the energy bill. The GE700 electronic heat cost allocators conform to regulation EN 834, and are based on the principle of dual-sensor temperature measurement.
Their use is possible in radiator systems that have single, or twin pipe distribution. They can also transmit the data remotely, at a radio frequency of 868 MHz (the ISM (Industrial, Scientific, Medical) European band) and are fitted with a long-life battery. The large range of accessories allow them to be assembled to the most common radiators on the market.

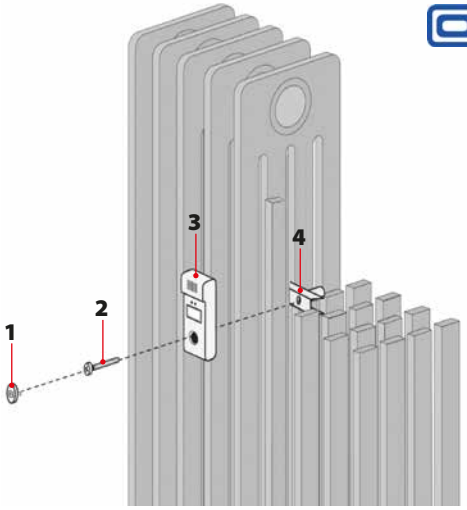
## GE700

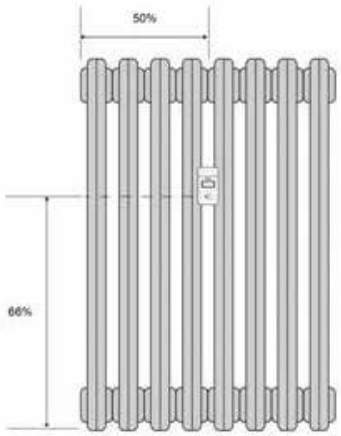
**HEAT COST ALLOCATORS**

| PRODUCT CODE | FEATURES | ❐ | ▦ |
|---|---|---|---|
| **GE700Y030** | - | 1 | 100 |
| **GE700Y033** | with remote sensor | 1 | 40 |

LEGEND

1 = Safety seal
2 = Fixing screws
3 = Heat cost allocator
4 = Support




Radio-controlled heat cost allocator, for measuring thermal consumption. With certification of conformity to the norm EN 834. EN 13757 Wireless M-Bus transmission of data at 868 MHz in accordance with OMS standard. Six-figure display for direct reading. Dual temperature sensor operation, with automatic switching to one sensor under critical temperature measuring conditions. Optical interface for programming/reading using a special configuration key. Anti-tamper seal and alarm disassembly with data storage. Daily storage of data, with monthly archive. Archive of consumptions and average temperatures, up to 24 months before. Powered by a lithium battery, standard lifetime, 10 years.
Type of centralized system: with 2 pipes / 1 pipe.
Sensor precision: error ≤ 1 %.
Heating temperature field (Tmin for initial count, Tmax): 21÷90 °C.
Temperature for initial count, summer mode: 38 °C.
Switching ΔT: 3 K.
Maximum radiator power: 12500 W.
Programmable data transmission frequency.
Transmission power ≤ 10 mW.
Warehouse storage temperature: 10÷30 °C.
Standard OMS.

Production check of every individual heat cost allocator. Certification document of the count precision, available (in accordance with EN 834).

FITTING THE HEAT COST ALLOCATOR TO THE RADIATOR

The heat cost allocator must be installed two thirds of the way up the radiator, and in the middle of it.
If the radiator has an uneven number of elements (that is, an even number of spaces between the elements, it is impossible to install the heat cost allocator in the middle), so the distributor should be moved to the space nearest to the delivery valve. If the radiator is over 2.2 m in length, it must be regarded as two radiators of half the length.

NOTES

**GE700Y033**: radio-controlled heat cost allocator with remote sensor.
To be used in installation situations in which the radiator is difficult to access, or where there is insufficient space to fit the heat cost allocator. In these cases, the heat cost allocator and probe can be installed separately, with the remote sensor in contact with the surface of the radiator. Includes probe and kit to fit the heat cost allocator to the wall. Suitable for measuring thermal consumption in convectors. Remote probe cable length: 2 m.

## GE700-1

| PRODUCT CODE | SIZE | ❐ | ▦ |
|---|---|---|---|
| **GE700Y100** | 35 mm fixing support, M4 screws x30 | 1 | 20 |
| **GE700Y101** | 43 mm fixing support, M4 screws x30 | 1 | 20 |
| **GE700Y102** | 53 mm fixing support, M4 screws x30 | 1 | 20 |
| **GE700Y103** | 55 mm fixing support, M3 screws x30 | 1 | 20 |
| **GE700Y104** | 37 mm fixing support, M3 screws x30 | 1 | 20 |
| **GE700Y105** | 67 mm fixing support, M4 screws x30 | 1 | 20 |
| **GE700Y106** | Bracket | 1 | 20 |
| **GE700Y107** | Threaded stud bolt | 1 | 20 |
| **GE700Y108** | Screw nut for the welding operation | 1 | 20 |
| **GE700Y109** | Spanner for tightening the GE700Y108 nut | 1 | - |
| **GE700Y110** | Additional plate for installing onto radiators that have a large space between the elements | 1 | 20 |
| **GE700Y801** | Welder | 1 | - |

Fixing elements for GE700 heat cost allocators.

## GE700-2

| PRODUCT CODE | DESCRIPTION | ❐ | ▦ |
|---|---|---|---|
| **GE700Y150** | optical key | 1 | - |
| **GESWY001** * | software | 1 | - |

Optical key, for configuring the GE700 heat cost allocators. Can be connected to a USB port, and programmed using specific software for heat cost allocators (GESWY001).

* The code refers to 1 user license.

# GE552-W

## WIRELESS M-BUS CENTRALIZATION

The centralisation of the wireless M-Bus (868 MHz) complies with EN 13757. The consumption data may be sent **remotely** or in **walk-by mode**.

## REMOTE MODE

The data received by the GE552Y053 is sent to the datalogger GE552Y052, allowing:
- the remote transmission of read data to programmable e-mail addresses;
- the management and display of the data from the PC, smartphone or tablet, through integrated web server if connected to the GSM/GPRS network.

### Wireless datalogger

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y052** | 1 | - |

Wireless M-Bus / M-Bus datalogger for collection, processing and recording of data from wired or wireless M-Bus devices.
Manages directly up to 500 wireless devices and 20 wired devices.

### Wireless signal repeater antenna

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y053** | 1 | - |

Wireless repeater and concentrator to extend the radio flow rate of the devices and for data transmission to the GE552Y052 datalogger.

## WALK-BY MODE

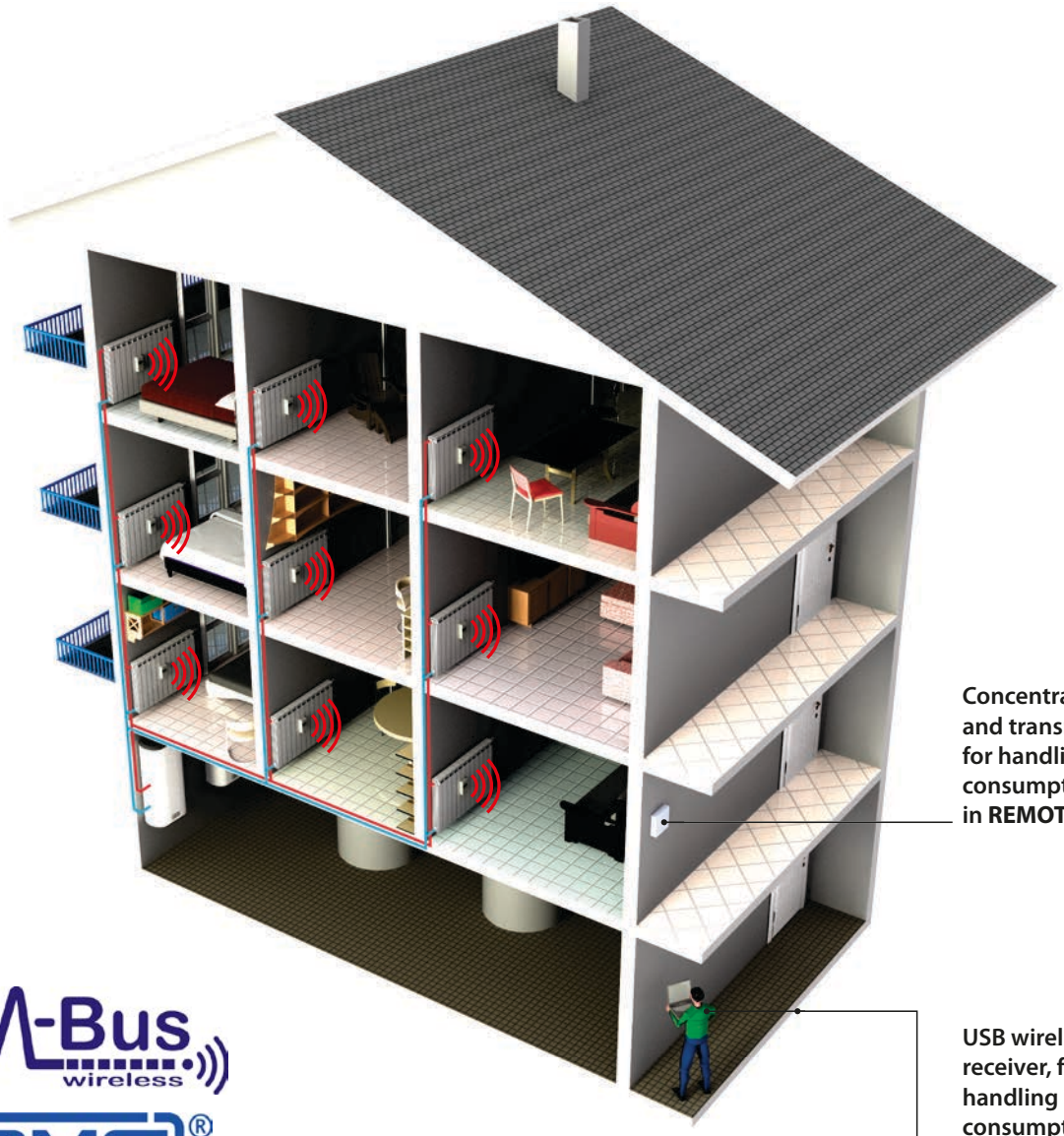
Data sent to a PC, received by GE552Y043 antenna connected to USB port.

### Wireless data receiver antenna

| PRODUCT CODE | | |
|---|---|---|
| **GE552Y043** | 1 | - |

Wireless data receiver for devices installed on the installation (heat cost allocators, wireless modules for meters). Can be connected to PC via USB port. Flow rate up to 400 m.

The operation is provided by the same software GESWY001 used for heat cost allocators programming.




M-Bus wireless

OMS®

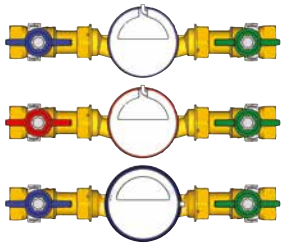
# BASIC UNITS AND ACCESSORIES (BOXES, TEMPLATES, INSULATIONS, OTHER COMPONENTS)

## GE550

**UNITS FOR SANITARY WATER**

| PRODUCT CODE | CONNECTIONS | TYPE OF SANITARY WATER | NOMINAL FLOW-RATE m³/h | MAX. WATER TEMPERATURE | WATER METER | COLLARS | UNITS LENGHT mm | ❐ | ⊞ |
|---|---|---|---|---|---|---|---|---|---|
| **GE550Y004** | 3/4" | cold | 1,5 | 30 °C | YES | included | 262 | 1 | - |
| **GE550Y005** | 1" | cold | 2,5 | 30 °C | YES | included | 310 | 1 | - |
| **GE550Y014** | 3/4" | hot | 1,5 | 90 °C | YES | included | 262 | 1 | - |
| **GE550Y015** | 1" | hot | 2,5 | 90 °C | YES | included | 310 | 1 | - |
| **GE550Y008** | 3/4" | cold - service water | 1,5 | 30 °C | YES | included | 262 | 1 | - |
| **GE550Y101** | 3/4" | cold | 1,5 | - | NO | included | 262 | 1 | - |
| **GE550Y102** | 1" | cold | 2,5 | - | NO | included | 310 | 1 | - |
| **GE550Y103** | 3/4" | hot | 1,5 | - | NO | included | 262 | 1 | - |
| **GE550Y104** | 1" | hot | 2,5 | - | NO | included | 310 | 1 | - |

Sanitary water metering units.
- Shut-off ball valves
- Check valve integrated with the shut-off ball valve (green handle)
- Available with or without water meter
- Max. working temperature:
  30 °C for cold sanitary water
  90 °C for hot sanitary water
- Max. working pressure: 16 bar (10 bar with plastic spacer)



**GE550Y004 - GE550Y005**
**GE550Y014 - GE550Y015**
**GE550Y008**

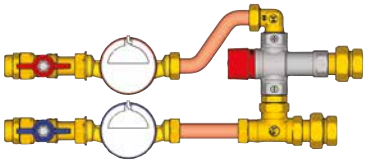
**GE550Y101-GE550Y102**
**GE550Y103-GE550Y104**

## GE550-1

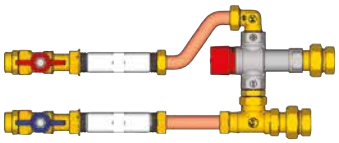
**GROUPS FOR SANITARY WATER WITH THERMOSTATIC MIXER**

| PRODUCT CODE | CONNECTIONS | TYPE OF SANITARY WATER | NOMINAL FLOW-RATE m³/h | MAX. WATER TEMPERATURE | WATER METERS | COLLARS | UNITS LENGHT mm | ❐ | ⊞ |
|---|---|---|---|---|---|---|---|---|---|
| **GE550Y024** | 3/4" | cold + hot | 1,5 | 90 °C (hot side) | YES | included | 420 | 1 | - |
| **GE550Y111** | 3/4" | cold + hot | 1,5 | 90 °C (hot side) | NO | included | 420 | 1 | - |

Sanitary water metering units, with thermostatic mixer.
- Shut-off ball valves
- Check valve
- Available with or without water meter
- Max. working temperature:
  30 °C on cold sanitary water side
  90 °C on hot sanitary water side
- Max. working pressure: 16 bar (10 bar with plastic spacer)



**GE550Y024**



**GE550Y111**

# GE550-2

UNITS FOR HEATING/COOLING

## DELIVERY UNITS

| PRODUCT CODE | CONNECTIONS | NOMINAL FLOW-RATE m³/h | ZONE VALVES | BALANCING VALVES | FILTER | COLLARS | UNITS LENGHT mm | ❐ | ▦ |
|---|---|---|---|---|---|---|---|---|---|
| **GE550Y121** | 3/4" | 1,5 | NO | NO | YES | included | 264 | 1 | - |
| **GE550Y122** | 1" | 2,5 | NO | NO | YES | included | 316 | 1 | - |
| **GE550Y123** | 3/4" | 1,5 | 2 ways | NO | NO | included | 237 | 1 | - |
| **GE550Y124** | 3/4" | 1,5 | 2 ways | NO | YES | included | 320 | 1 | - |
| **GE550Y125** | 1" | 2,5 | 2 ways | NO | YES | included | 371 | 1 | - |
| **GE550Y135** | 1" | 2,5 | 2 ways | YES | YES | included | 508 | 1 | - |
| **GE550Y136** | 3/4" | 1,5 | 2 ways | YES | YES | included | 439 | 1 | - |
| **GE550Y137** | 3/4" | 1,5 | NO | YES | NO | included | 264 | 1 | - |
| **GE550Y138** | 3/4" | 1,5 | NO | YES | YES | included | 345 | 1 | - |
| **GE550Y139** | 1" | 2,5 | NO | YES | YES | included | 411 | 1 | - |

Delivery metering units for use in heating and/or cooling circuits.
- Shut-off ball valves
- Depending on the version, there are connections of 3/4" or 1", a motorized zone valve, a static balancing valve and a filter
- Max. working temperature: 110 °C
- Max. working pressure: 16 bar

**GE550Y121**
**GE550Y122**

**GE550Y123**

**GE550Y124**
**GE550Y125**

**GE550Y135**
**GE550Y136**

**GE550Y137**

**GE550Y138**
**GE550Y139**

## RETURN UNITS

| PRODUCT CODE | CONNECTIONS | NOMINAL FLOW-RATE m³/h | PLASTIC SPACER | COLLARS | UNITS LENGHT mm | SPACER CENTRE DISTANCE mm | ❐ | ▦ |
|---|---|---|---|---|---|---|---|---|
| **GE550Y129** | 3/4" | 1,5 | YES | included | 254 | 110 | 1 | - |
| **GE550Y130** | 1" | 2,5 | YES | included | 300 | 130 | 1 | - |

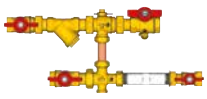
Return metering units for use in heating and cooling circuits.
- Shut-off ball valves
- Plastic spacer for installation of thermal energy meter
- Max. working temperature: 110 °C (90 °C with plastic spacer)
- Max. working pressure: 16 bar (10 bar with plastic spacer)

**GE550Y129**
**GE550Y130**

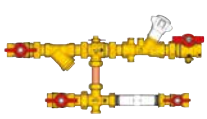
## DELIVERY AND RETURN UNITS

| PRODUCT CODE | CONNECTIONS | NOMINAL FLOW-RATE m³/h | ZONE VALVES | BALANCING | COLLARS | UNITS LENGHT mm | SPACER CENTRE DISTANCE mm | ❐ | ▦ |
|---|---|---|---|---|---|---|---|---|---|
| **GE550Y166** | 3/4" | 1,5 | 3 ways | NO | included | 422 | 110 | 1 | - |
| **GE550Y167** | 1" | 2,5 | 3 ways | NO | included | 491 | 130 | 1 | - |
| **GE550Y168** | 3/4" | 1,5 | 3 ways | static | included | 453 | 110 | 1 | - |
| **GE550Y169** | 1" | 2,5 | 3 ways | static | included | 491 | 130 | 1 | - |
| **GE550Y170** | 3/4" | 1,5 | 3 ways | dynamic | included | 444 | 110 | 1 | - |
| **GE550Y171** | 1" | 2,5 | 3 ways | dynamic | included | 490 | 130 | 1 | - |

Delivery & return metering units, for use in heating and cooling circuits.
- Shut-off ball valves, may be sealed, can be plumbed
- Filter with basket in stainless steel
- Plastic spacer for installation of thermal energy meter
- Depending on the version, 3/4" and 1" connections, and static or dynamic balancing valves are available
- Max. working temperature: 110 °C (90 °C, with plastic spacer pipe)
- Max. working pressure: 16 bar (10 bar with plastic spacer pipe)



**GE550Y166**
**GE550Y167**



**GE550Y168**
**GE550Y169**

**GE550Y170**
**GE550Y171**

# GE551 CABINETS

Flush-mounting cabinets in painted sheet metal (RAL9010).
- Lockable door
- Adjustable frame depth
- Front and side holes for the system transfer pipes with closure caps
- Box with fairlead for electrical components

| CODE | DIMENSIONS (L x H x D) mm | AREAS FOR UNITS FOR HEAT/ COND. | GUIDES FOR SANITARY UNITS | | |
|---|---|---|---|---|---|
| **GE551Y031** | 750 x 1500 x 190 | 3÷4 | 3÷4 | 1 | - |
| **GE551Y038** | 500 x 500 x 110 | 1 | 2 | 1 | - |
| **GE551Y039** | 600 x 600 x 110 | 1 | 3 | 1 | - |
| **GE551Y040** | 600 x 1100 x 110 | 2 | 6 | 1 | - |

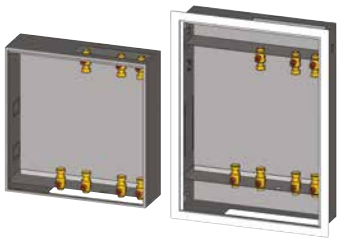
# GE551-1 FRAMES

Electro-galvanised metallic frame pre-arranged for the installation of metering units for heating and/or cooling, and units for sanitary and/or service water.

| CODE | DIMENSIONS (L x H x D) mm | AREAS FOR UNITS FOR HEAT/AIR COND. | GUIDES FOR SANITARY UNITS | | |
|---|---|---|---|---|---|
| **GE551Y154** | 500 x 500 x 10 | 1 | 3 | 1 | - |

# GE551-2 TEMPLATES

## TEMPLATES FOR STANDARD SATELLITES, GE556



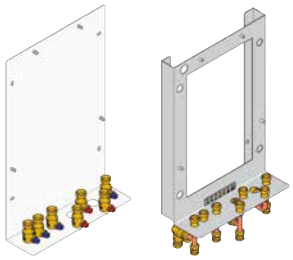
Template for installation at the worksite of GE556 satellites.
Completed with shut-off valves.

**GE551Y072:** external
**GE551Y073:** flush-mounting

**GE551Y072**
**GE551Y073**

| CODE | CONNECTIONS | DIMENSIONS (L x H x D) mm | No. of SHUT-OFF VALVE | | |
|---|---|---|---|---|---|
| **GE551Y072** | 3/4" | 560 x 570 x 165 | 7 | 1 | - |
| **GE551Y073** | 3/4" | 570 x 770 x 165 | 7 | 1 | - |

## TEMPLATES FOR SATELLITE WITH DOUBLE EXCHANGER, GE556-1



Template for installation at the worksite of GE556-1 satellites.
Completed with shut-off valves.

**GE551Y083, GE551Y084**: with aerial connection system (on the back side of the template).

**GE551Y081**
**GE551Y083**

**GE551Y082**
**GE551Y084**

| CODE | CONNECTIONS | DIMENSIONS (L x H x D) mm | No. of SHUT-OFF VALVE | | |
|---|---|---|---|---|---|
| **GE551Y081** | 3/4" | 450 x 720 x 150 | 4 | 1 | - |
| **GE551Y082** | 3/4" | 450 x 720 x 150 | 7 | 1 | - |
| **GE551Y083** | Ø22 | 450 x 720 x 208 | 4 | 1 | - |
| **GE551Y084** | Ø22 | 450 x 720 x 208 | 7 | 1 | - |

## TEMPLATES FOR SATELLITE WITH ELECTRONIC REGULATION, GE556-2

Template for installation at the worksite of GE556-2 satellites.
Completed with shut-off valves.

**GE551Y074**

| CODE | CONNECTIONS | DIMENSIONS (L x H x D) mm | No. of SHUT-OFF VALVE | | |
|---|---|---|---|---|---|
| **GE551Y074** | 3/4" | 450 x 720 x 72 | 7 | 1 | - |

## TEMPLATES FOR SATELLITE WITH DIFFERENTIAL PRESSURE CONTROL VALVE, GE556-4

Template for installation at the worksite of GE556-4 satellites.
Completed with shut-off valves.

**GE551Y075**

| CODE | CONNECTIONS | DIMENSIONS (L x H x D) mm | No. of SHUT-OFF VALVE | | |
|---|---|---|---|---|---|
| **GE551Y075** | 3/4" | 450 x 292 x 72 | 7 | 1 | - |

## GE551-3 COLLARS

Plastic collars, for fastening metering units for heating and/or cooling and for sanitary and/or service water units.

| PRODUCT CODE | DIMENSIONS | USE | | |
|---|---|---|---|---|
| **GE551Y002** | DN25 | For 3/4" outputs | 1 | - |
| **GE551Y003** | DN32 | For 3/4" outputs | 1 | - |
| **GE551Y004** | DN40 | For 1" outputs | 1 | - |

## GE551-4 INSULATION

**GE551Y171**

Insulation for the heating and/or cooling delivery unit GE550Y136.

Dimensions:
465 x 125 x 90 mm (LxHxD).

| PRODUCT CODE | | |
|---|---|---|
| **GE551Y171** | 1 | - |

**GE551Y173**

Insulation for sanitary water meter, GE552-2 series, only for 3/4" sizes.

Dimensions:
170 x 90 x 65 mm (LxHxD).

| PRODUCT CODE | | |
|---|---|---|
| **GE551Y173** | 1 | - |

**GE551Y177**

Insulation for the GE555Y461 module and heating and/or cooling delivery and return unit GE550Y166.

Dimensions:
450 x 250 x 90 mm (LxHxD).

| PRODUCT CODE | | |
|---|---|---|
| **GE551Y177** | 1 | - |

**GE551Y182**

Insulation for user module GE555Y472.

| CODE | | |
|---|---|---|
| **GE551Y182** | 1 | - |

**GE551Y178**

Insulation for the GE555Y462, GE555Y463, GE555Y468, GE555Y469 modules and heating and/or cooling delivery units GE550Y167, GE555Y168, GE555Y169, GE555Y170, GE555Y171.

Dimensions:
530 x 250 x 90 mm (LxHxD).

| PRODUCT CODE | | |
|---|---|---|
| **GE551Y178** | 1 | - |

**GE551Y179**

Insulation for metering units GE550-3 with 70 mm centre distance (codes GE550Y112, GE550Y113, GE550Y114, GE550Y116, GE550Y117, GE550Y144, GE550Y146, GE550Y147).

Dimensions:
300 x 110 x 80 mm (LxHxD).

| PRODUCT CODE | | |
|---|---|---|
| **GE551Y179** | 1 | - |

**GE551Y180**

Insulation for satellites GE556Y176, GE556Y177.

Dimensions:
300 x 430 x 100 mm (LxHxD).

| PRODUCT CODE | | |
|---|---|---|
| **GE551Y180** | 1 | - |