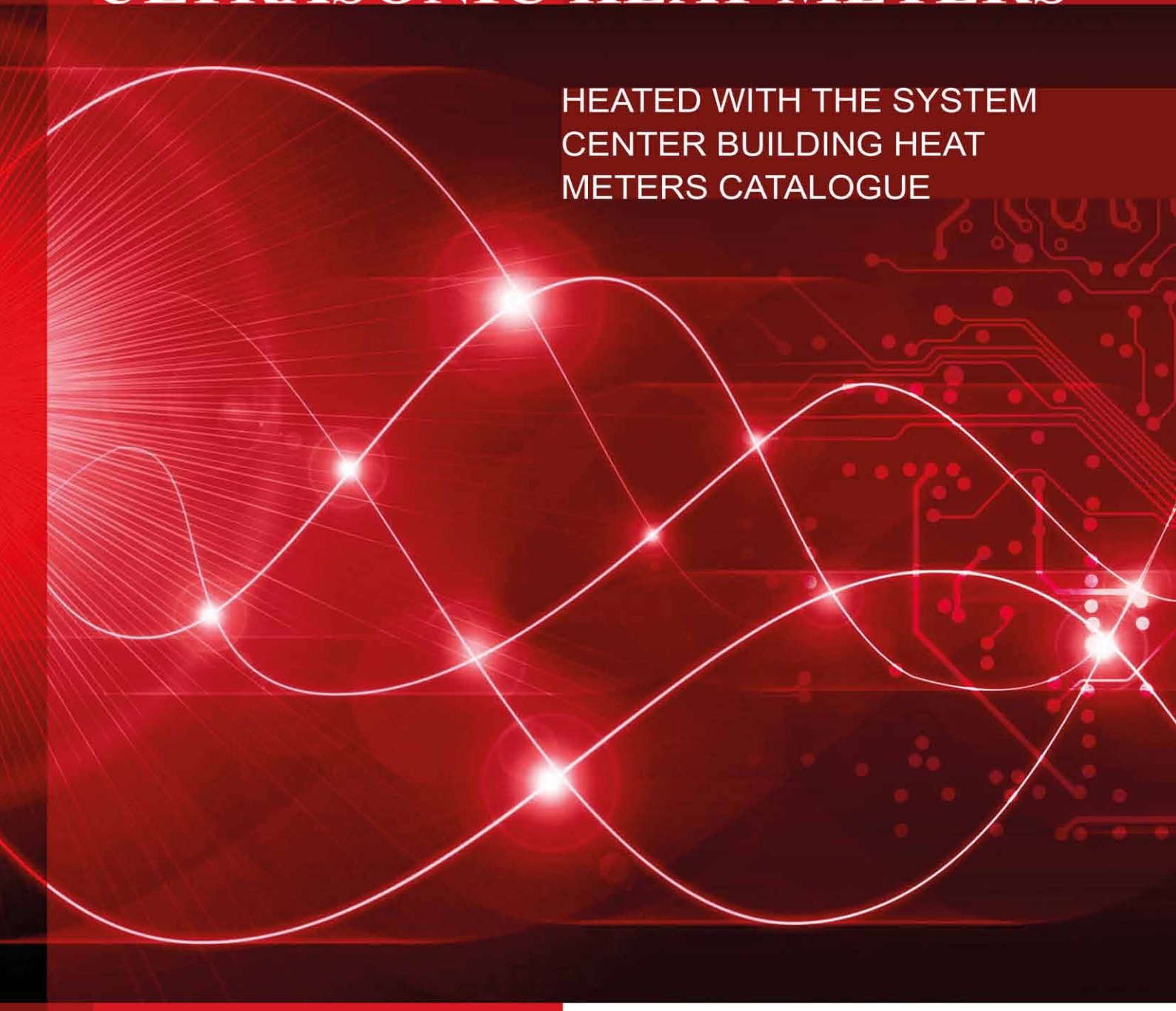
UIS

ULTRASONIC HEAT METERS

HEATED WITH THE SYSTEM
CENTER BUILDING HEAT
METERS CATALOGUE



BAYLAN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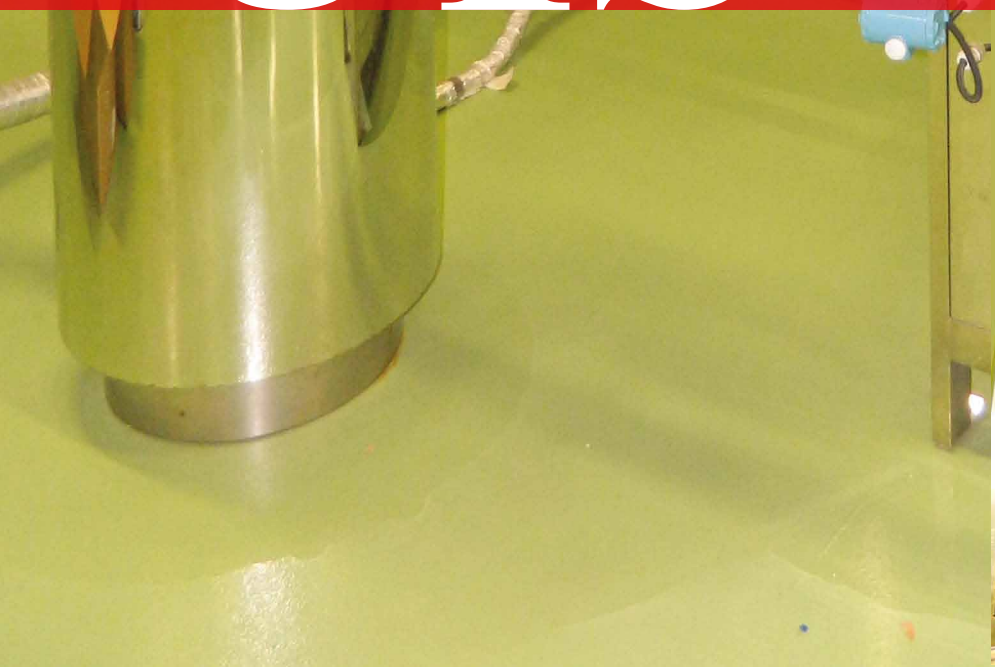


BAYLAN

In 1955,with the founded by our father Osman Baylan repair and maintenance of water meters atelier stepped into the sector İbrahim Baylan and Mehmet Akif Baylan as brothers; our fathers bequeathed to us, working determination, innovation, technology monitoring, skillful and honest productivity, respect for consumer and the environment combined with patriotism have implemented first plant of Baylan Water Meters in 1992 with.

The world's water resources decrease day by day, and efficient use of these resources is one of the most important criteria of water, conscious of the need to precisely measure the production of our water meters realized. In this way today in 37 countries on 5 continents of the world, our quality and our brand, our products are used, every year the demand for our products is increasing quantities. Industrial enterprise engaged in the export of our country as one of the top 1000 this proud We are very proud.

An effective global brand in our country dependent on foreign energy sources conscious in order to use our investments long R&D activities as a result of the water meters in the industry we have gained our experience and the latest technology, combining heat meter production line and our setting station investment has been completed.

Contribute to the conscious use of energy and to give direction to the current heat meter market is our main target. So far we have created in the water meter "BAYLAN stands behind their products" mentioned, then in the heat meter market will continue to be our motto.
Believing in BAYLAN brand, now been in the family for our employees, believing and support us that our partners, I am grateful to our partners and our esteemed customers.
Sincerely,

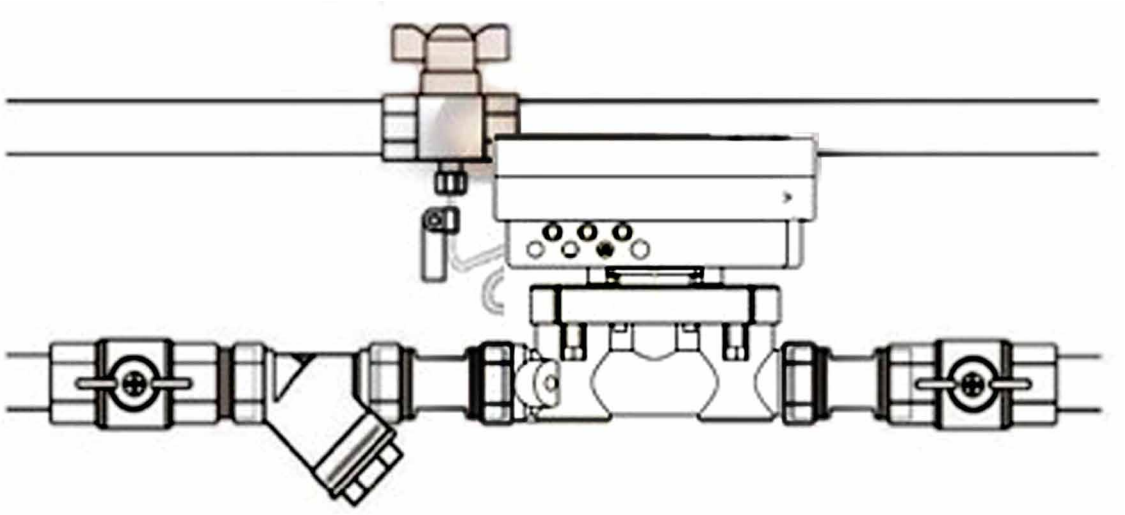
İbrahim BAYLAN
Chairman of the Board
BAYLAN ÖLÇÜ ALETLERİ
SAN. ve TİC. LTD. ŞTİ.

ULTRASONIC HEAT METERS
US MODEL

GENERAL

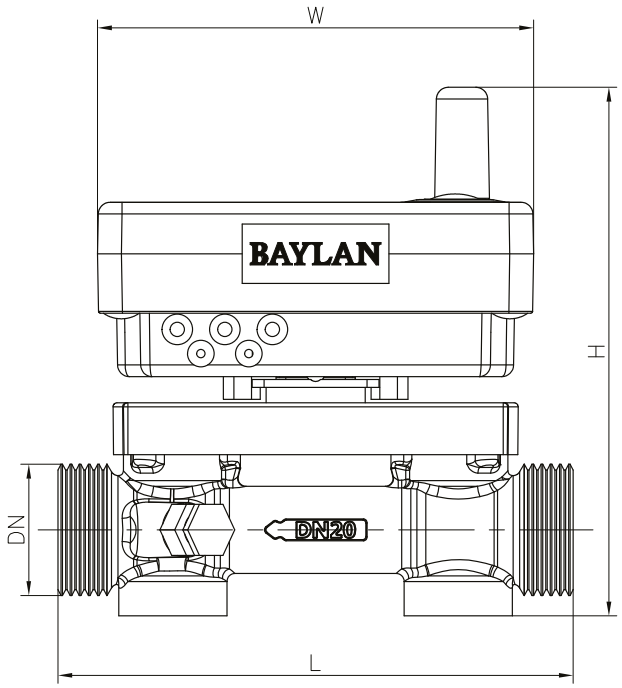
- The compact design uses ultrasonic measurement technology
- Due to ultrasonic technology, constantly and high measurement sensitivity
- Wide dynamic measuring range and low pressure loss
- Via the LCD display providing access to meter data for billing and check out
- Due to the lack of moving parts, high measurement accuracy
- Lithium battery, 10 years lifetime
- Low pressure loss
- Solid stainless steel reflector
- Can be mounted horizontally or vertically in position desired
- IP 65 protection class
- M-Bus or Pulse Output or Modbus, wM-Bus interfaces
- Comprehensive fault indication
- OIML ve MID (SK 13-020 MI-004) certified
- Advanced service network

PROJECT PRESENTATION SHAPE

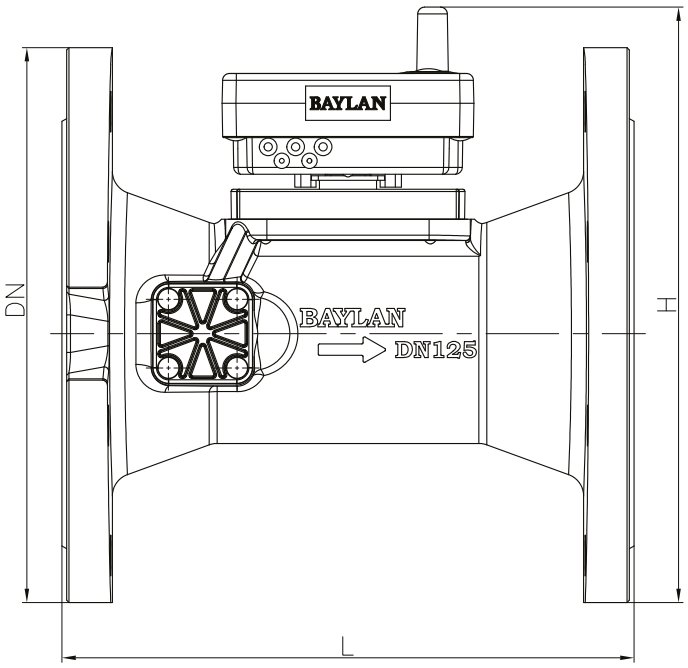


DIMENSIONS

Model	DN (mm)	Dimensions (mm)			
		L Length	W Width	H Heigth	Connection
US1	15	110	110	126	G3/4″
US2	20	130	110	135	G1″
US3	25	160	110	144	G1″1/4
US4	32	180	110	150	G1″1/2
US5	40	200	110	180	G2″
US6	50	200	165	187	Flange
US7	65	200	185	203	Flange
US8	80	225	200	215	Flange
US9	100	250	220	229	Flange
US10	125	250	250	256	Flange
US11	150	300	285	280	Flange
US12	200	350	340	330	Flange



US1 - US5 Model



US6 - US12 Model

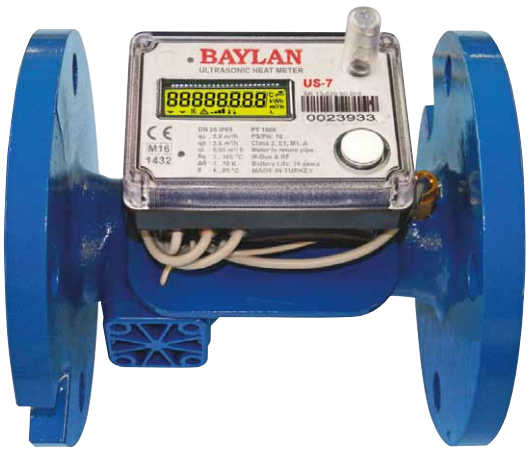
Unaffected by water and dust to IP65 protection class

PERFORMANCE DATA

Model			US1	US2	US3	US4	US5	US6	US7	US8	US9	US10	US11	US12
Nominal Diameter			DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Minimum Flowrate	qi	(m^3/h)	0.03	0.05	0.07	0.12	0.2	0.15	0.25	0.40	0.60	1.00	1.50	2.50
Perminent Flow	qp	(m^3/h)	1.5	2.5	3.5	6.0	10	15	25	40	60	100	150	250
Maximum Flow	qs	(m^3/h)	3.0	5.0	7.0	12.0	20	30	50	80	120	200	300	500
Temperature		θq	1...105 °C (Pt1000)											
Measurement		Δθ	3...70 K (Pt1000)											
Range of Operation		θ	4...95 °C (Pt1000)											
Measurement Class			Class 2 (EN 1434)											
Operating Preassure			1.6 MPa											
Preassure Loss at Nominal Flow			25 kPa											
Temperature Sensor Type			Pt1000											
Sensor Cable Length			1.5m											
Battery			3.6V lithium battery											
Comm. Interface			M-Bus / wM-Bus / Pulse output, Modbus (Optional)											
Display			Power: kW, Cumulative Heat Counter: kWh or MJ, Counter Range: 0-99999999 Transitional Flow: m^3/h, Cumulative Flow: m^3, Input Temperature & Output Temperature: °C Temperature Difference: °C, Cumulative Heat Input Period: s, Date: D/M/Y, Time: h/m/s											
Display Resolution			Heat Amount: 0.1 kWh-1 kWh, Cumulative Flow: 0.001 m^3-1 m^3, Temperature: 0.01°C, Temperature Difference: 0.01 °C											
Operating Temperature			-30 °C + 55 °C											
Weight		(kg)	0,7	0,82	0,85	1,3	1,7	10,1	11,2	12,8	15,2	20,1	27,1	37,1
Installation			Output water pipe (made out of water temperature sensor assembly is ready)											
Mechanical Class			IP65											
Mechanical Class			M1											
Electromagnetic Class			E1											
Environmental Class			A											

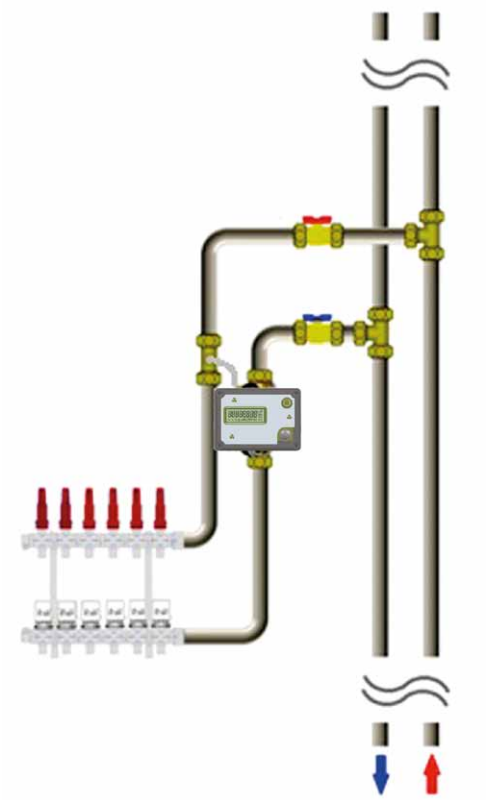
"Due to continuous development of our products, we reserve the right to modify our product design or construction without prior notice."

US2 - DN20



US7 - DN65

MATTERS TO BE CONSIDERED IN HEAT METER INSTALLATION



► Can be mounted vertical or horizontally. Must be sure that not mounting inclined.

► Plumbing before installed, the plumbing of the cleaning is done and should be sure there is no air.

► In order, unless otherwise specified must be installed to return line. Temperature sensor, a piece corresponding to the line input must be connected and sealed

HEAT METER INSTALLATION WITH T-TRACK

► According to the direction of the arrow mark on the flow must be connected. İn input and output a spherical valve should be used absolutely.
Must be connnected to the system with fitting.

► The mounting location prevent from water coming to heat meter should be selected.

HEAT METER INSTALLATION FLOOR ENTRY INTO THE STATION

DISPLAY INFORMATION

► BAYLAN US is fitted with an easily readable LCD, including 8 digits, measuring units and information field.

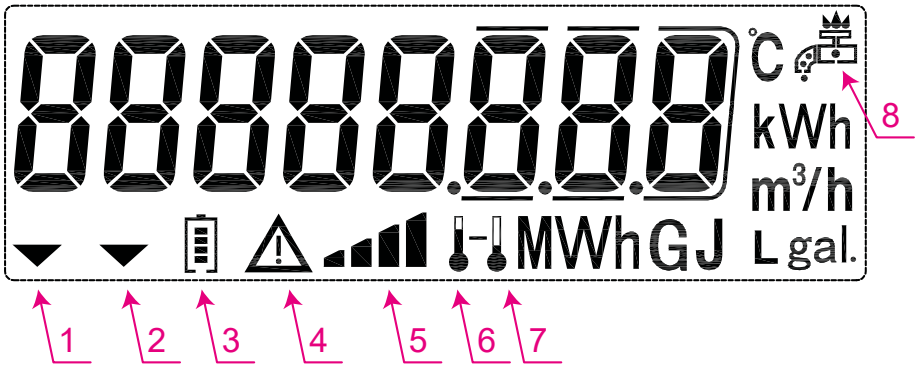
► The display automatically returns to LCD sleep mode 10 minutes after the latest activation of the push button.

► When power on, the meter will reset and displays full screen to allow users to detect if there is any problem with the LCD.

► Users may press the button to read the meter information such as Accumulated volume, current flow rate, water temperature, etc.

► To save the battery, the meter switches to sleep mode (display off) if the button is not pressed for approx. 10 minutes. It can be woken up by pressing the button approximately 2 seconds.

► The following information is displayed in order by shot pressing the button: temperature in, temperature out, temperature difference, instant flow rate, cumulative flow volume, instant heat power, cumulative hear consumption, date, time, continuous working time, meter ID, software ID, type ID, M-bus address, etc.



No.	Icon	Name	Meaning
1		Calibration mode	Under calibration
2		Reserved	Reserved
3		Low battery warming	User is reminded to replace the battery with a new one.
4		Error warning	Warnings for error
5		Reserved	Reserved
6		Temperature of inflow water	Water temperature in the flow sensor pipe
7		Temperature of outflow water	Water temperature in the return pipe
8		Reserved	Reserved

M-BUS SYSTEM

► M-BUS is a standard protocol of the the meter reading with cable. With M-bus output interface water meters, two-core cable through the central reading panel enables monitoring. M-Bus reading system that separates it from the other main features are as follows;

► It is a standard system and a common protocol.

► Implementation and use is simple.

► Central reading panel system is supplied with an average 38.5 V-40 V.

► It is used simple 2 x 0,75 wire phone cord.(6 x 0.75 cable in standard cases
It is desirable). The main reason for this, 2 wires for heat meters, 2 wires for hot water meters and 2 wires for replacement.

► 6-core 0.75 mm wire unshielded cable must be captured. To shield the lower signal strength is not preferred.

► Two wires calorimeters, A water meter must be connected to the two wires. Two wires should be kept for replacement. M-bus cable near the power line should not strictly.

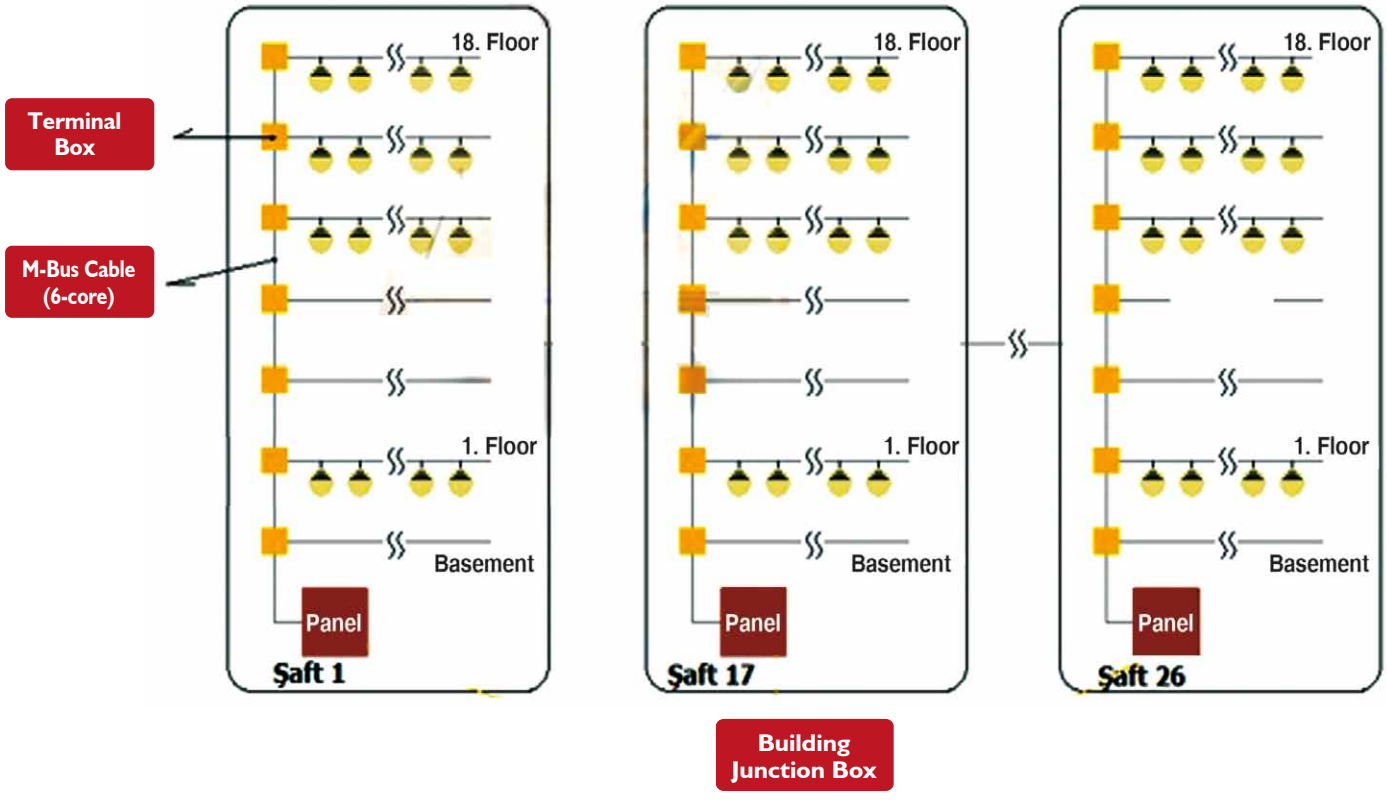
► Cable transport due to the weak current signal must pass from the shaft. Main cable in the boiler room should contact the large diameter calorimeter.

► When it comes to the main cable floor apartment must be distributed to the other terminal and junction boxes separated by.

► Tree branches should be in the form of distribution. Definitely should not ring topology.

► Calorimetry on their own m-bus cable should be taken as 50 cm. junction boxes should be placed accordingly.

SAMPLE CONNECTION DIAGRAM



COMPACT DESIGN

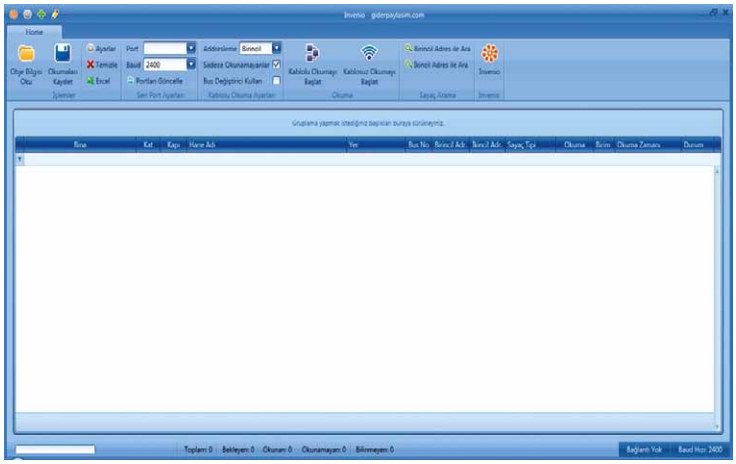
Flowmeter, the calculation unit and temperature sensors and that the device is calibrated together.

With the Ultrasonic Principle,thanks to the compact design makes fully electronic measurement ,assembly is mounted in the field easily.

Thanks to the detachable electronic housing can be read easily in hard to reach places.Electronics housing can be positioned parallel and perpendicular to the water flow.

Because of large display and simple menus easily and quickly counter with that the reading of the value.

READING PROGRAM



- Wireless M-Bus M-Bus and the possibility of reading
- Details by sorting, grouping facilities
- counters on the market the opportunity to read widely
- Save as Excel
- different baud-rate work in-
- Automatic port recognition
- Subscribe reading according to the list
- Counters Search

EXPENSE SHARING SOFTWARE

- Web-based interface from the computer through independent use
- Continuous Backup
- Central heating and sanitary hot water systems heating and sanitary hot water costs sharing to be shared according to the regulations
- Automatic comparison to make
- Subscriber base as a PDF statement preparation costs
- Executive summary preparation
- To automatically apply the requirement of 15°C
- Goes with optional text message and e-mail distribution statement

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CE
MI-001
OIML R 49

ISO 14001 - OHSAS 18001 Certified System SWISS TS

ISO 27001 Certified System SWISS TS

ISO 9001 BUREAU VERITAS Certification

BAYLAN

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