SMART METER TECHNOLOGIES

CALME



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ABOUTS

They have been in the mechanical installation industry since 1950. They have been operating in the sector since 1973 in the mechanical installation sector, such as purchase-sale, plan-project and mechanical contracting. Our other founders are; Since 1996, within the body of Erciyes University Technopark, it has provided solutions with optical reader manufacturing and software supporting these systems. Bringing together the mechanics and electronics sectors that our developing world needs, FNF Teknoloji SAN. TRADE. Inc. Since 2014, it has been producing and serving innovations such as calorimeter, water meter manufacturing and remote reading systems.



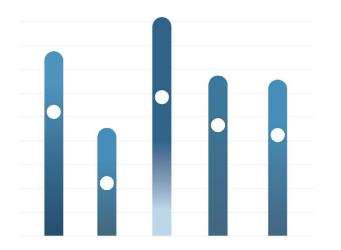






COMPANY PROFILE

- A. We have a 3000 m² working area in a 7000 m² closed area in Kayseri Organized Industrial Zone.
- B. We are the leading Water Meter and Heat meter manufacturer company in Turkey with a staff of 50 people.
- C. We have a monthly production capacity of 20.000 Meters.
- D. We export to Poland, Georgia, Hungary, Dubai and Qatar Countries.









COMPANY CULTURE

- Enterprise Mission: Continuous development, contribution to society, to be the leader of intelligent instruments.
- Enterprise Values: The greatest benevolence is like water, the highest virtue tolerates all.
- Enterprise Competitiveness: First-class R&D team, leading core technology, excellent product quality.
- Business Philosophy: To be science & technology oriented, to survive by quality, and develop by credibility.
- Quality Philosophy: Strengthen management, strive for perfection, continuously improve quality.
- Employment Philosophy: There is no perfect individual, only a perfect team.
- Working Philosophy: Serious work attitude, noble professional ethics.
- Marketing Philosophy: fulfill contract, ensure quality, honesty and trustworthiness.



EQUIPMENT AND MACHINES



- CNC TRANSFER MACHINES
- PLASTIC INJECTION MACHINES
- CNC LATHE MACHINE
- DRUM SANDBLASTING MACHINE
- □ AUTOMATIC BURR CUTTING MACHINE
- ROD CUTTING MACHINE
- □ 150 TON C TYPE PRESSING MACHINE
- □ 300 TON H TYPE PRESSING MACHINE
- **250 TON H TYPE PRESSING MACHINE**
- 4 CHANNEL INDUSTRIAL HEATING (ANNEALING) FURNACE
- ELECTRONIC ANGLE CUT ROTARY BAND SAW



PRODUCTS

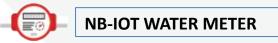


HEAT METER

It works on the principle of ultrasonic flowmeter and mechanical flowmeter. Sound signals upstream and downstream of the water by sending the times here precisely in pico The flow rate of the water is measured in seconds. is calculated. Application of this modern heatmeter technology Thanks to this, the measurements are precise and reliable. It can work stably for more than years. Hybrid heatmeter heating and cooling in the same line It is used in systems where it can be done via The heatmeter can calculate the heating and cooling energy consumption separately. Polimeter heatmeters have a hybrid structure.



It has a measurement and calculation system that calculates the speed of the fluid passing over a tribune and the volume of the fluid depending on the speed of the tribune.



The water meter adopts NB-IOT communication technology, communicates with the cloud server through the operator's network, and realizes the wireless reading and remote transmission control of the user's water consumption. Wireless remote water meter does not require wiring construction, easy to install and use.





HEAT METER

HIGH PRECISION, LONG LASTING AND DURABLE HEAT METER

- The flow meter part is durable and all metal.
- With its brass body structure, it has been specially designed to withstand the high pressure in its installation and to make the least pressure loss.
- There are no active moving parts inside.because of that that can keep own calibration value for long time
- Its wear-free structure provides long-lasting and trouble-free operation assurance.
- Thanks to its specially designed mirrors, it instantly filters the erroneous signals that occur in the water passage channel.
- Our SPECIAL design eliminates the possibility of inaccurate measurements. Only signals transmitted along the cylindrical tube can be measured.
- It prevents it from being covered with dirt due to the foreign substances in the hot water. It has the feature of preventing soot and rust and preventing clogging.
- Airplane wing shaped reflector design provides laminar flow. The calorimeter cleans itself with the flow rate provided on the reflector.
- The calorimeter is self-cleaning with the flow rate provided on the reflector. It provides high sensitivity even at low flow rates.
- It has IP65 protection class. It is not affected by moisture, dust and water.
- According to EN 1434, it consists of 3 main units that measure with compact meter type and hybrid indicator, flow meter of heat meters, pair of temperature sensors and calculation ruler.

			Technica	l Data			
Nominal Diameter	DN	15	15	20	25	32	40
Counter Length	mm	110	110	130	160	180	200
Join Diameter		G3/4"B	G3/4"B	G1B	G1"1/4B	G1"1/2B	G2B
Nominal Flow Rate	qs	1,2 m³/h	3 m³/h	5 m³/h	7 m³/h	12 m³/h	20 m³/h
Maximum Flow Rate	$\mathbf{q}_{\mathbf{p}}$	0,6 m³/h	1,5 m³/h	2,5 m³/h	3,5 m³/h	6 m³/h	10 m³/h
Minimum Flow Rate	qi	6 l/h	15 l/h	25 l/h	35 l/h	600 l/h	100 l/h
Working Temperature	°C	5 - 90 °C	5 - 90 °C	5 - 90 °C	5 - 90 °C	5 - 90 °C	5 - 90 °C
Nominal Pressure	PN	16 bar					
Mounting Type		Vertical Horizontal	Vertical Horizontal	Vertical Horizontal	Vertical Horizontal	Vertical Horizontal	Vertical Horizontal
Dimensions	mm	I : 110	I : 110	I : 130	I : 160	I:180	I:200
		h : 120	h : 120	h : 120	h : 121	h : 125	h : 130
		w : 86	w : 86	w : 86	w : 89	w : 98	w : 109

ULTRASONIC HEAT METER PM01-20 POLIMETER ULTRASONIC HEAT METER ULTRASONIC HEAT METER PM01-20 POLIMETER POLIMETER

Measuring Temperature Range Measurement Temperature Difference Working Ambient Temperature Min. Consumption Calculation Difference Heat dissolution Measuring frequency Screen

Energy Unit Interfaces Power source Sensor Type and Length Sensor Diameters Sensor Cable Length Pulse Cable Length Protection Class Measurement Class Approvals

Calculation Unit Technical Data

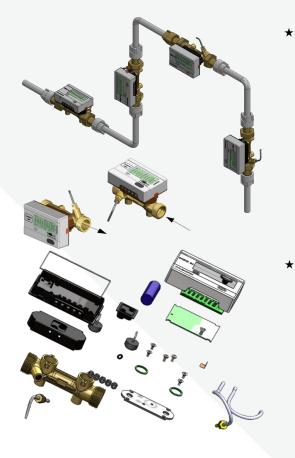
2°C - 150°C 3K - 85K 5°C - 55°C 2°C 0.01°C Dynamic metering 4 - 20 seconds LCD-8 digits and special characters and backlight kWh (optionally MWh) M-Bus 3.6V Lithium Battery PT 1000 5,0 mm ve 5,2 mm 1.5 meter 1 meter IP 65 MID Class 2-3 MID ve CE





HEAT METER

PM01 ULTRASONIC HEAT METER ABOUT

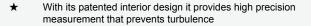


It provides ease of use as it is compatible with horizontal, vertical, inlet and return mounting.

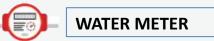
t1 🏶 🔬 max min 🕟 t2 FLOW Flow Direction $\langle\!\langle\!\langle$ Heating * Coolina Intallation Type Units m³∕h Warning Inlet Temperature 8 Digits Display Outlet Temperature Button

★ User friendly with wider LCD screen and backlight

PM01 Blown Assembly



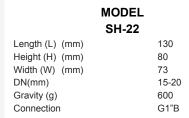




HIGH PRECISION, LONG LASTING AND DURABLE WATER METER

- Sensitive measurement with SINGLE-JET flow meter.
- Measuring range is 30°C 90°C
- Communication option with pulse output and/or M-Bus protocol.
- Safe design that does not allow interference from outside.
- Complies with the EN 14154 standarts.
- It is not affected by magnetic field. With this feature, can make safe measurements.
- Hot water meter is used at water temperatures between 30°C 90°C.
- Calmet hot water meters support M-Bus and RF communication protocols.
- Guaranteed for 2 years.
- Ability to measure at low flow rates
- Flow measurement range Q1=31,25 L/h Q2=50 L/h Q3=2,5 m3/h
 - Q4=3,125 m3/h
- Measurement range T30/90oC
- Maximum applicable pressure (MAP) 16 Bar
- At nominal flow (Qn) pressure loss (Dp=250 mbar)
- it is safe, cannot be intervened from outside.

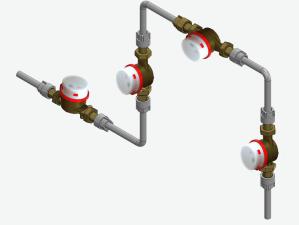
Technical Data				
Nominal Diameter	DN	15	20	
Counter Length	mm	110	130	
	Q ₁	0.010 m³/h	0.016 m³/h	
	Q ₂	0.016 m³/h	0.025 m³/h	
	Q 3	2.5 m³/h	4.0 m³/h	
	Q ₄	3.125 m³/h	5 m³/h	
Mounting Type		Vertical Horizontal	Vertical Horizontal	
	mm	I : 110	I : 130	
		h : 90	h : 95	
		w : 85	w : 85	







SINGLE JET WATER METERS ABOUT



★ It provides ease of use as it is compatible with horizontal, vertical, inlet and return mounting.



★ Single JET Water Meter seal plan.

NB-IOT WATER METER

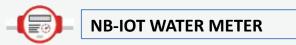
HIGH PRECISION, LONG LASTING AND DURABLE NB-IOT WATER METER

- The water meter has a built-in Internet of Things communication module, uploading data through the base station, no need to lay lines on site, no need for collectors, concentrators and other equipment.
- Each water meter has a built-in industrial SIM card (M2M), which is a non-ordinary mobile phone SIM card The whole machine has high sealing performance, the motor compartment is independently sealed, and the circuit board is potted with waterproof glue. Meet standard IP68 protection standard.
- Built-in large-capacity lithium battery, when the battery voltage is low, the centralized copy management platform will pop up an alarm.
- Turn of the valve when the power is off. when the battery is manually disconnected, the water meter valve will automatically close.
- Imported ultra-low power consumption microprocessor and micro-power consumption technology are used in the circuit, which greatly reduces the power consumption of the water meter itself and prolongs the working like of the battery.
- It can collect key parameters such as ambient temperature, battery voltage, and signal strength, and upload them to the cloud server for data analysis.
- It can realize low-temperature antifreeze warning, low battery warning, battery unplugging warning and other event alarms.
- Protection against external electricity and electromagnetic attacks. When there is strong electricity or strong magnetic interference from the outside, the water meter will automatically close the valve
- With differential pricing function, can support 9 levels and 10 types of water prices; seasonal water price, can set the date and time to switch the water price automatically, support online payment system.
- Support NB-IOT module, low power consumption, wide coverage and more convenient transmission
- Electromechanical separation design, there is no wire between the base meter and the control unit.
- Integrated design, there is no wire and electrodes exposed when the enclosure is disassembled.
- Semi-liquid sealed wet dial mechanism, high sensitivity and clear reading.
- With a lid to prevent foreing matter from falling into the dial plate and affecting manual readings.
- Mobile phone APP supporting, the mobile phone can directly read the running data of the water meter through the APP, and diagnose the working status of the water meter.
- App switch valve In case of emergency, when the server is abnormal or the network fails, the mobile phone can directly control the water meter valve on/off through the NFC APP.



Nominal size (DN)(mm) Overload flow rate (Q4)m ³ /h Normal flow rate (Q2)m ³ /h Transitional flow rate (Q2)m ³ /h Min. flow rate (Q1)m ³ /h Measure range (Q3/Q1) Measurement grade Working frequency (band number) Working pressure Pressure loss	130 3.125 2.5 0.05/0.04 0.032/0.025	20 5 4 0.08/0.064 0.05/0.04 80/100 class 2 B3 B5 B8 B20—.e.t.c ≤1.6 M Pa(PN16) ∆p53	25 7.875 6.3 0.126/0.1 0.078/0.063
Operating Temp.	Cold Water		Hot Water
Climate & mechanical environmental safety leve	(T30):0.1ºC-30ºC	Class B	(T90):0.1°C-90°C
Electromagnetic compatibility level	-15	E1	
Quiescent current		≤25uA	
Working Voltage		3.6V lithium battery (ER2655	00)
Waterproof level		IP68	
valve control		optional	
Transmission way		Reed switch/hall	
Meter body material		brass/composed	
Meter length (mm)	165	195	225





IOT METER OPERATION MANUEL

- ★ Run the client software:
- ★ Login:password
- ★ Push the button on the meter to reactive the meter to upload the reading



★ It provides ease of use as it is compatible with horizontal, vertical, inlet and return mounting.



- With it's patented interior design it provides high
 - ★ Unassembled the upper unit locked screws:



★ Insert the sim card :







MIŞCAREA ROMÂNĂ PENTRU CALITATE ROMANIAN MOVEMENT FOR QUALITY

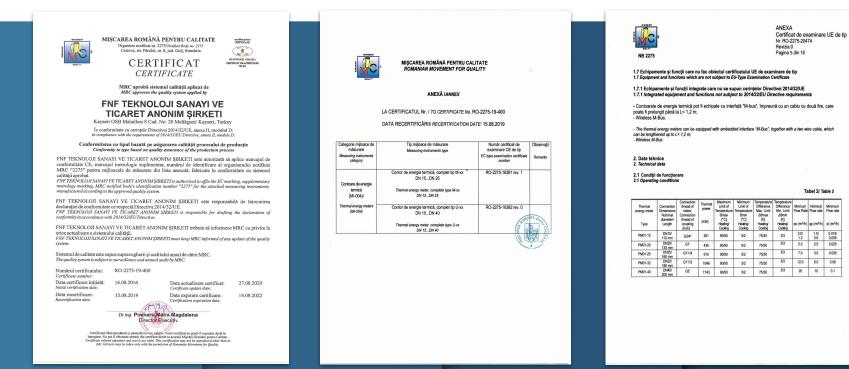
ANEXĂ /ANNEX

LA CERTIFICATUL Nr. / TO CERTIFICATE No. RO-2275-19-400

DATA ACTUALIZĂRII/ UPDATE DATE: 27.08.2020

Categorie mijioace de măsurare	Tip mijloace de másurare Messurina instruments type	Număr certificat de examinare CE de tip	Observații
Measuring instruments category		EC type examination certificate number	Remarks
Contoare de energie ternicà (MI-004)/ Thornal energy meters (MI-004)	Contor de energie termică, complet tip M-xx DN 15DN 25 Thermal energy meter, complete type M-xx DN 15DN 25	RO-2275-16381 rev. 1	
	Contor de energie termică, complet tip U-xx DN 15DN 40 7hermal energy meter, complete type U-xx DN 15DN 40	RO-2275-16382 rev. 0	
	Contor de energie termică, tip PM01-XX Thermel energy meter, type PM01-XX	RO-2275-20474, rev. 0	MANA Pene





Tabel 2/ Table 2

as (m³/h) ap (m³/h) ai (m³/h)

12.0 6.0 0.06

3.0/ 1.5/ 0.015/

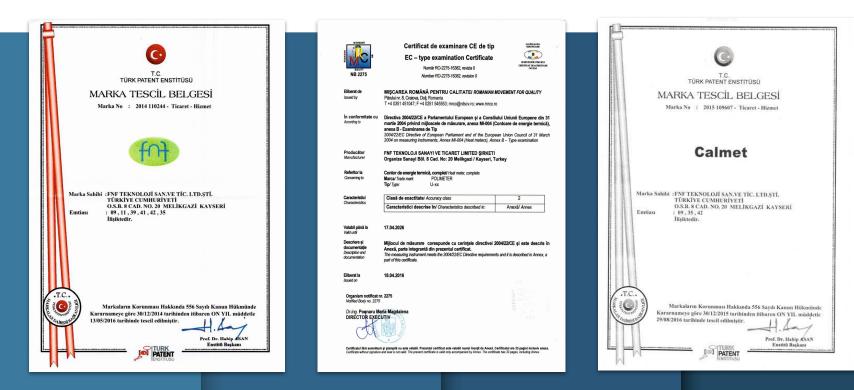
5.0 2.5 0.025

7.0 3.5 0.035

20 10 0.1









MÉRŐMŰSZER BOLT

A LEGNAGYOBB VÁLASZTÉK GYŐZŐDJÖN MEG RÓLA

I am writing you on behalf of your water/heat meter products.

Our company MEROMUSZER BOLT KFT would like to thank FNF TEKNOLOJI for being one of our most professional and dependable partners in business. We've successfully worked with FNF TEKNOLOJI for over 3 years. There are not many companies that we have that solid of a relationship with and it's due to the integrity of everyone at FNF TEKNOLOJI that we are happy to recommend them for the Water meter and Heat meter solutions. No matter what the project, water or heating, and cooling system, FNF TEKNOLOJI has always been there to provide quality products, solutions, and services.

Contact information :

Budapest / Hungary meromuszer@meromuszer.com +36707769898

27.10.2021

HERYAK JANOS

Signature

>OLIMETER

Mr. M. Fatih,

I would like to share a few words about our relationship with you and your company FNF Teknoloji. We have worked with them on projects both big and small for over 4 years. FNF Teknoloji has taken the time to understand our business and how to solve our projects. We also rely heavily on the FNF Teknoloji project management process knowing that we will have one point of contact throughout each project's lifecycle. We can always count on FNF Teknoloji excellent customer service, not only during an active project cycle or in regard to a past project but also when we are brainstorming ideas or looking for advice on processes. Also, we have always been satisfied with the water meter and heat meter products they produce. Additionally, Customer Services offered to give us an opportunity to learn about new technologies, processes, or concepts and they also provide a great atmosphere for networking with other industry professionals.

Our company POLIMETER SP.Z O. O, Thank you for your partnership so far and I hope to take our partnership to the next level.

Contact information : Warszawa / Poland handel@polimeter.com.pl +48 662 66 85 72

28.12.2021

MAREK STOLINSKI



ISTANBUL KOZYATAGI CARREFOUR MALL











ISTANBUL MASLAK MASHATTAN PROJECT





EVORA ISTANBUL TUZLA PROJECT





BODRUM SEBA GOLKOY HOUSING PROJECT





KUMSMALL PROJECT





CARREFOUR BURSA PROJECT

