

DAEHAN WATER METER

Material Approval Documents



MD Digital
water meter



MD Water meter



Water meter



Remote meter reading
terminal-integrated
water meter



Remote meter
reading device



Large water meter



DAEHAN SMART METER CO.,LTD.

<http://www.daehanmeter.com>



a factory view



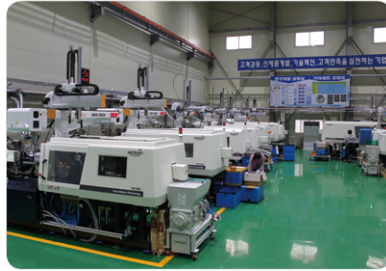
Electronic automatic water meter testbench 1,6
(Metrological Class horizontal R100 to R200) (15 to 50mm)



Electronic automatic water meter testbench 1,6
(Metrological Class horizontal R100 to R200) (15 to 50mm)



Water meter casting production processing facility



Plastic Injection molding facilities



water meter parts mold



Self-produced water meter exhibition hall



Self-produced water meter exhibition hall



Constant temperature and humidity test chamber
(for freezing prevent product)

We sincerely thank the companies who have provided us with countless advice and guided our development, as well as the customers who have trusted and chosen Daehan Smart Meter Co., Ltd.'s products, for standing with us through numerous hardships and challenges since the founding of Daehan Smart Meter Co., Ltd. to where we are today.

As the Number 1 provider in the Water meter system in Korea, Daehan Smart meter has been actively supporting Korean market needs for more than 30 years. Daehan proudly offers Korea government certified KS (Korea industrial Standard) mark in our water appliances and offers variety of associated measuring instruments, all manufactured within Daehan vertically integrated manufacturing system, including casting, injecting and molding.

“Foremost Quality priority with Quality management”.

We are all guided by our management philosophy to provide utmost trust to our customers. Daehan also pledges to focus even more on quality improvement and new product development following our expansion and relocation in January 2020, expanding our solution capabilities to our customers.

Thank you.



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MD Multi-jet Dry Water Meter

MD Type : 15, 20, 25, 32, 40, 50mm



Performance and Dimensions

Specification(mm)	Unit	15	20	25	32	40	50
Q3/Q1 R		100	100	100	100	100	100
Starting flow	L/h	6	10	12	15	30	50
Q1	m³/h	0.025	0.04	0.063	0.1	0.16	0.25
Q2	m³/h	0.04	0.064	0.1	0.16	0.256	0.4
Q3	m³/h	2.5	4	6.3	10	16	25
Maximum indication	m³	9,999			99,999		
Length	mm	165	190	225	230	245	305
Height	mm	100	109	114	116	130	155
Width	mm	95	100	100	100	117	138
Meter connection screws	inch	PF 3/4	PF 1	PF 1 1/4	PF 1 1/2	PF 2	PF 2 1/2
Mounting connection screws	inch	PT 1/2	PT 3/4	PT 1	PT 1 1/4	PT 1 1/2	PT 2

■ Installation Conditions : Horizontal ■ Maximum operating pressure : 10 bar ■ Maximum operating temperature : up to 30

Multi-jet Dry Water Meter

Attachment 1. Multi-Jet Dry Water Meter & Components

별첨 1. 복갑건식 수도미터 및 구성품

  Brand : Daehan - OIML R49 and ISO 4064 standard - Model : DAE HAN - Origin : Korea - Kind of water meter : Multi-jet Dry Water Meter - Dimension : • DN15, length: 165 mm [Q3 : 2.5m³/h, Q2/Q1:1.6(±2.0%), Q3/Q1:100(±5.0%)] - Material : Brass + Stainless - Working temperature : up to 30°C - Working pressure : up to 10bar	상세내역 Components	
	상부외갑 Upper Body	하부외갑 Lower Body
		
	내갑세트 Internal Parts	조작방지캡 Tamper proof cap
		
표기사항 Name Plate Display		
		

Multi-jet Wet Water Meter

Water meter Wet : 15, 20, 25, 32, 40, 50mm



Performance and Dimensions

Specification(mm)	Unit	15	20	25	32	40	50
Q3/Q1 R		100	100	100	100	100	100
Starting flow	L/h	6	10	12	15	30	50
Q1	m³/h	0.025	0.04	0.063	0.1	0.16	0.25
Q2	m³/h	0.04	0.064	0.1	0.16	0.256	0.4
Q3	m³/h	2.5	4	6.3	10	16	25
Maximum indication	m³	9,999			99,999		
Length	mm	165	190	225	230	245	305
Height	mm	100	109	114	116	130	155
Width	mm	95	100	100	100	117	138
Meter connection screws	inch	PF 3/4	PF 1	PF 1 1/4	PF 1 1/2	PF 2	PF 2 1/2
Mounting connection screws	inch	PT 1/2	PT 3/4	PT 1	PT 1 1/4	PT 1 1/2	PT 2

■ Installation Conditions : Horizontal ■ Maximum operating pressure : 10 bar ■ Maximum operating temperature : up to 30

Multi-jet Wet Water Meter

Attachment 2. Multi-Jet Wet Water Meter & Components

별첨 2. 복갑습식 수도미터 및 구성품

Brand : Daehan - OIML R49 and ISO 4064 standard - Model : DAE HAN - Origin : Korea - Kind of water meter : Multi-jet Wet Water Meter - Dimension : • DN15, length: 165 mm [Q3 : 2.5m³/h, Q2/Q1 : 1.6(±2.0%), Q3/Q1 : 100(±5.0%)] - Material : Brass + Stainless - Working temperature : up to 30°C - Working pressure : up to 10bar	상세내역 Components	
	상부외갑 Upper Body	하부외갑 Lower Body
		
	내갑세트 Internal Parts	조작방지캡 Tamper proof cap
		
표기사항 Name Plate Display		
DAE HAN Q₃:2.5m³/h(±2.0%) Q₂/Q₁:1.6(±2.0%) Q₃/Q₁:100(±5.0%) Validity period for test : 5year DAEHAN SMART METER CO., LTD. Made in Korea 15mm H		

Multi-jet dry digital water meter

Water Meter MD Dry : 15, 20, 25, 32, 40, 50mm



Performance and Dimensions

Specification(mm)	Unit	15	20	25	32	40	50
Q3/Q1 R		100	100	100	100	100	100
Starting flow	L/h	6	10	12	15	30	50
Q1	m³/h	0.025	0.04	0.063	0.1	0.16	0.25
Q2	m³/h	0.04	0.064	0.1	0.16	0.256	0.4
Q3	m³/h	2.5	4	6.3	10	16	25
Maximum indication	m³	9,999			99,999		
Length	mm	165	190	225	230	245	305
Height	mm	100	109	114	116	130	155
Width	mm	95	100	100	100	117	138
Meter connection screws	inch	PF 3/4	PF 1	PF 1 1/4	PF 1 1/2	PF 2	PF 2 1/2
Mounting connection screws	inch	PT 1/2	PT 3/4	PT 1	PT 1 1/4	PT 1 1/2	PT 2

■ Installation Conditions : Horizontal ■ Maximum operating pressure : 10 bar ■ Maximum operating temperature : up to 30

Multi-jet Dry Digital Water Meter

Attachment 3. Multi-jet Dry Digital Water Meter & Components

별첨 3. 복갑건식 디지털 수도미터 및 구성품

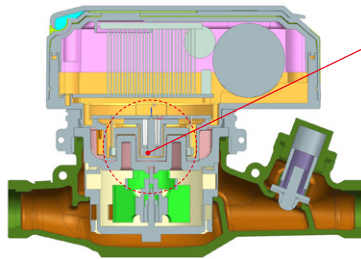
DAE HAN   Brand : Daehan - OIML R49 and ISO 4064 standard - Model: DAE HAN - Origin : Korea - Kind of water meter : Multi-jet Dry Digital Water Meter - Dimension : • DN15, length: 165 mm [Q3 : 2.5m³/h, Q2/Q1:1.6(±2.0%), Q3/Q1:100(±5.0%)] - Material : Brass - Working temperature: up to 30°C - Working pressure: up to 10 bar	상세내역 Components	
	상부외갑 Upper Body	하부외갑 Lower Body
		
	내갑세트 Internal Parts	조작방지캡 Tamper proof cap
		
	전자지시부 LCD Display with Electric Parts	
		

표기사항 Name Plate Display

DIGITAL WATER METER DN 15mm DAE HAN  H,C T30 DC 3.6V Made in Korea DAEHAN SMART METER CO., LTD. Q3: 2.5m³/h(±2.0%) Q2/Q1: 1.6(±2.0%) Q3/Q1: 100(±5.0%) Validity period for test:5year

Digital Non-Magnetic Integrated Water Meter

15, 20, 25, 32, 40, 50mm



Product Features

- A non-magnetic integrated water meter with digital terminals, eliminating the use of traditional MR sensor magnets, making it impossible for fraudulent use even with strong external magnets.
- Prevents backflow and blocks fine flow 100% (based on Seoul standards).
- Built-in wireless communication for easy meter reading, economical operation, and extended battery life.
- Digitally integrated for easy installation and maintenance with a one-stop service system.
- Remote meter reading capability leading to reduced installation costs (by 50%).
- Equipped with anti-freezing function to prevent damages caused by freezing in winter.
- Fully waterproof display unit (IP 68) allowing usage even in areas prone to flooding.
- No communication cables reducing communication errors and facilitating maintenance.

Development of Digital Non-Magnetic Integrated Water Meter (15mm~50mm)

Overview	Overview A non-magnetic integrated water meter that does not utilize MR sensor magnets, making it impossible for fraudulent use even with strong external magnets. (15mm~50mm)	
Improvements	● Integration of temperature data collection for freeze prevention. ● Incorporation of magnetic field detection for prevention of water meter misuse. ● Adoption of Seoul standard protocol. ● Improvement in water resistance and 100% flow rate accuracy. ● Testing of magnets within the range of 4000~10000 gauss. ● Integration of NFC functionality for maintenance and management automation.	

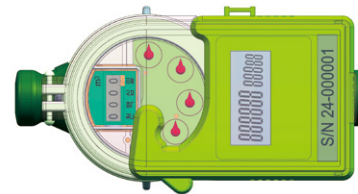
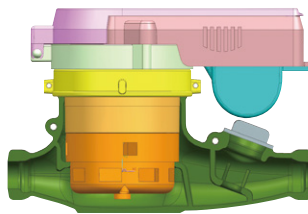
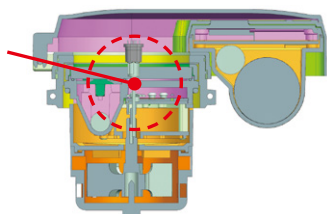
Performance and Dimensions

Standard(mm)		Unit	15	20	25	32	40	50
Q3/Q1 R			100	100	100	100	100	100
Starting Flow Rate		L/h	6	10	12	15	30	50
Minimum Flow Rate (Q1)	± 5.0 %	m³/h	0.016	0.025	0.04	0.063	0.1	0.16
Transition Flow Rate(Q2/Q1 R) : 1.6	± 2.0 %	m³/h	0.0256	0.04	0.064	0.1008	0.16	0.256
Maximum Flow Rate(Q3)	± 2.0 %	m³/h	1.6	2.5	4.0	6.3	10	16
Optimal Usage Flow Range		m³/h	0.016~1.2	0.025~1.2	0.04~1.5	0.063~3.0	0.1~5.0	0.16~8.0
Maximum Indicated Volume		m³	999,999.999 99					
Meter Length	L		165	190	225	230	245	305
Meter Height	H		100	109	114	116	130	155
Meter Width	W		95	100	100	100	117	138
Meter Connection Screw	D		PT 3/4	PF 1	PT 1 1/4	PF 1 1/2	PF 2	PF 2 1/2
Installation Connection Screw	(inch)		PT 1/2	PT 3/4	PT 1	PT 1 1/4	PT 1 1/2	PT 2

- Installation Conditions : Horizontal ■ Maximum operating pressure : 10 bar ■ Maximum operating temperature : up to 30

Double-dampable non-magnetic terminal integrated water meter

15, 20, 25, 32, 40, 50mm



Product Features

- This water meter is an encapsulated wet type non-magnetic hybrid meter, which eliminates the use of magnets typically found in conventional MR sensor-based meters, rendering it tamper-proof against strong external magnets.
- It features a hybrid design with both analog and digital measurement displays, ensuring both user-friendliness and reliability.
- Guarantees backflow prevention and 100% blockage of fine flow (based on Seoul standards).
- Built-in wireless communication enables easy and economical meter reading, extending battery life significantly.
- The encapsulated wet type hybrid design facilitates easy installation and implements a one-stop service system for maintenance.
- Remote meter reading capability leads to cost savings in installation (up to 50%).
- Equipped with frost prevention functionality to prevent damage during winter freezes.
- Its display unit is completely waterproof (IP 68), making it suitable for use even in areas prone to frequent flooding.
- With no communication cables, the likelihood of communication errors decreases, making maintenance convenient.

Development of Encapsulated Wet Type Non-magnetic Hybrid Water Meter (15mm~50mm)

Overview

This water meter, as a non-magnetic type, renders tampering with strong external magnets impossible, making it highly secure against unauthorized usage (15mm~50mm).

Improvements

- Integration of temperature data collection for frost prevention.
- Inclusion of magnetic field detection to prevent meter tampering.
- Enhancement of anti-corrosion and 100% water rate efficiency.
- Adoption of Seoul city standard protocols.
- Incorporation of NFC functionality for maintenance and management automation.
- Testing magnetic strength ranging from 4000 to 10000 gauss.
- Reduction in frequency of complaints during billing.

Performance and Dimensions

Standard(mm)		Unit	15	20	25	32	40	50
Q3/Q1 R			100	100	100	100	100	100
Starting Flow Rate		L/h	6	10	12	15	30	50
Minimum Flow Rate(Q1)	± 5.0 %	m³/h	0.016	0.025	0.04	0.063	0.1	0.16
Transition Flow Rate(Q2/Q1 R) : 1:6	± 2.0 %	m³/h	0.0256	0.04	0.064	0.2008	0.16	0.256
Maximum Flow Rate(Q3)	± 2.0 %	m³/h	1.6	2.5	4.0	6.3	10	16
Optimal Usage Flow Range		m³/h	0.016~1.2	0.025~1.2	0.04~1.5	0.063~3.0	0.1~5.0	0.16~8.0
Maximum Indicated Volume		m³	999,999.999 99					
Meter Length	L		165	190	225	230	245	305
Meter Height	H		100	109	114	116	130	155
Meter Width	W		95	100	100	100	117	138
Meter Connection Screw	D		PT 3/4	PF 1	PT 1 1/4	PF 1 1/2	PF 2	PF 2 1/2
Installation Connection Screw	(inch)		PT 1/2	PT 3/4	PT 1	PT 1 1/4	PT 1 1/2	PT 2

■ Installation Conditions : Horizontal ■ Maximum operating pressure : 10 bar ■ Maximum operating temperature : up to 30

Multi-jet Dry Digital non-magnetic water meter with backflow prevention



Multi-jet Dry Digital non-magnetic water meter with backflow prevention/freeze protection featuring tamper-proof cap with transparent magnifying lens.

Product Features

- Utilizes MR sensor technology, rendering it immune to fraudulent use with external strong magnets.
- Allows measurement without susceptibility to external magnetic interference.
- Economic and convenient meter reading with a non-magnetic water meter, extending battery life.
- Enables remote meter reading, providing economic benefits.
- Equipped with freeze prevention function to preempt winter frost damage.
- Fully waterproof display unit (IP68), suitable for frequent flooding areas.
- Electronic display unit rated as Grade C, resistant to freezing conditions.
- Reinforced with PPS (polyphenylene sulfide) for enhanced frost resistance.
- Incorporates a backflow prevention device, ensuring complete blockage of reverse flow even at microflow

Development of Multi-jet Dry Digital Non-Magnetic Water Meter(15mm~50mm)

Overview

As a Multi-jet Dry Digital non-magnetic water meter, it does not use MR sensor-type magnets, so it Accessing strong magnets from the outside does not interfere at all. It is a water meter that cannot be used illegally (15mm~50mm)

Improvements

- Equipped with temperature data collection to prevent freezing
- Includes magnet detection feature to prevent unauthorized meter tampering.
- Enhances quality to achieve anti-fouling and 100% flow rate accuracy.
- Ensures magnets pass rigorous testing (4000~10000 gauss, denoted as G).

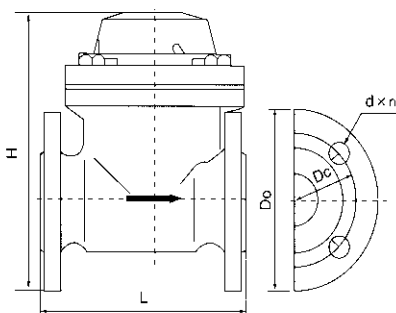
Performance and Dimensions

Standard(mm)		Unit	15	20	25	32	40	50
Q3/Q1 R			100	100	100	100	100	100
Starting Flow Rate		L/h	6	10	12	15	30	50
Minimum Flow Rate (Q1)	± 5.0 %	m³/h	0.016	0.025	0.04	0.063	0.1	0.16
Transition Flow Rate(Q2/Q1 R) : 1.6	± 2.0 %	m³/h	0.0256	0.04	0.064	0.1008	0.16	0.256
Maximum Flow Rate(Q3)	± 2.0 %	m³/h	1.6	2.5	4.0	6.3	10	16
Optimal Usage Flow Range		m³/h	0.016~1.2	0.025~1.2	0.04~1.5	0.063~3.0	0.1~5.0	0.16~8.0
Maximum Indicated Volume		m³	999,999.999 99					
Meter Length	L		165	190	225	230	245	305
Meter Height	H		100	109	114	116	130	155
Meter Width	W		95	100	100	100	117	138
Meter Connection Screw	D		PT 3/4	PF 1	PT 1 1/4	PF 1 1/2	PF 2	PF 2 1/2
Installation Connection Screw	(inch)		PT 1/2	PT 3/4	PT 1	PT 1 1/4	PT 1 1/2	PT 2

■ Installation Conditions : Horizontal ■ Maximum operating pressure : 10 bar ■ Maximum operating temperature : up to 30

Eco-friendly water meter (Stainless highly-sensitive large water meter)

● 40, 50, 80, 100, 150, 200, 250, 300mm



Stainless highly-sensitive large water meter

Digital Large Cast Iron High Sensitivity Water Meter

Characteristic

- Being developed with new material, it has longer durability compared with other product thanks to elasticity of material in spite of water impact.
- Being manufactured with stainless material,
 - it has no toxicity and does not react to harmful chemicals.
 - it has strong corrosion-resistance internally and externally.
- Having excellent abrasion-resistance, it has permanent durability and it is eco-friendly product which can be recycled.
- It has smart appearance thanks to suitable surface treatment.
- It has high hardness and longer durability compared with other product.
- It is possible to install at any angle, i.e. horizontal, vertical or sloping surface.
- Bubble is entirely eliminated because indicating unit is perfectly sealed (IP 68 Grade).
- Rotating rotor is applied which maintain balance according to hydrodynamics.
- Reading is easy because indicating unit can rotate by 360°.
- Durability is increased thanks to overload resistance function.

Performance Table

Bore dimension	mm	40	50	80	100	150	200	250	300
Qmax(Q4)	Overload quantity of flow (m³/h)	78.75	78.75	125	200	312.5	560	787.5	1250
	One time among 24hours								
	in Q max or 1,2xQmax(±2%) within 5minutes								
Qn(Q3)	Maximum Flow Rate(±2%) (m³/h)	63	63	100	160	250	400	630	1000
Qn(Q2)	Transitional Flow Rate(±2%) (m³/h)	0.8	0.8	1.0	1.6	3.2	5.12	10.08	16.0
Qmin(Q1)	Minimum Flow Rate(±5%) (m³/h)	0.5	0.5	0.625	1.0	2.0	3.2	6.3	10.0
	Starting Flow Rate (m³/h)	0.30	0.30	0.35	0.40	1.0	1.5	3.0	8.0
Maximum instruction volume(m³)		999,999				999,999			
Minimum instruction volume(ℓ)		1 ℓ				10 ℓ			
Operating Condition		Up to 30 degrees							

Terminal integrated Large water meter (Remote meter reading)

Type : 65, 80, 100, 150, 200, 250, 300mm



Performance

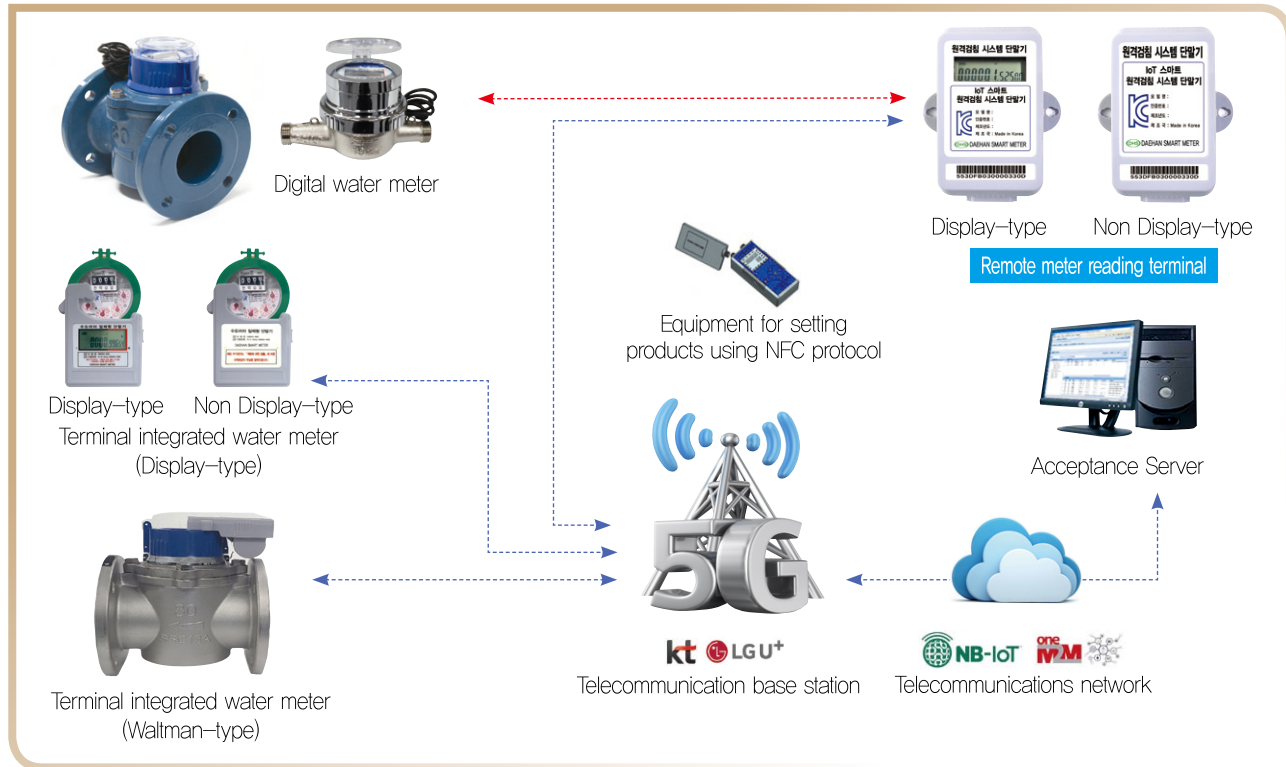
Dimension	mm	40	50	65	80	100	150	200	250	300
Qmax(Q ₄)	Overload quantity of flow (m³/h) 24시간중 Qmax에서 1회 또는 1.2XQmax(±2%)5분이내)	78.75	78.75	78.75	125	200	312.5	560	787.5	1250
Qmax(Q ₃)	Maximum Flow Rate (±2%) (m³/h)	63	63	63	100	160	250	400	630	1000
Qmax(Q ₂)	Transitional Flow Rate(±2%) (m³/h)	0.8	0.8	0.8	1.0	1.6	3.2	5.12	10.08	16.0
Qmax(Q ₃)	Minimum Flow Rate(±5%) (m³/h)	0.5	0.5	0.5	0.625	1.0	2.0	3.2	6.3	10.0
	Starting Flow Rate (m³/h)	0.30	0.30	0.30	0.35	0.40	1.0	1.5	3.0	8.0
Maximum instruction volume(m³)		999,999					999,999			
Minimum instruction volume(ℓ)		1ℓ					10ℓ			
Operating condition		For tap water Up to 30℃								

Dimensions and Weight

Division			Diameter									
			mm	40	50	65	80	100	150	200	250	300
Specifications	Width	L	mm	220	200	200	206	241	300	350	450	500
	Height	H	mm	120	120	120	150	150	177	206	470	485
Weight	Water meter		kg	7.7	7.7	7.7	14	18.0	35.5	50.5	72.3	155
	Internal Parts		kg	0.336	0.336	0.336	0.336	0.336	1.17	1.17	1.17	1.17
	Body		kg	8.9	9.8	11	15	18.3	34.5	48.5	82.5	91.8

Remote meter reading solution

Smart remote meter reading solution (configuration diagram)



Product introduction

Smart meter reading terminal



- Model : SWED-350
- Wireless auto smart terminal
- NB-IoT network communication technology
- KT/LGU+ Network
- Landfill type
- Communication method : NB-IoT, UART
- MCU : 16bit Programmable
- Power : 3.6V 19000mAh Lithium Battery
- Transmission Output : 23dBm
- Waterproof rating : IP 68
- Size : 46(D)x113(W)x137(H) mm

- Model : SWED-360
- Wireless auto smart terminal
- NB-IoT network communication technology
- KT/LGU+ Network
- Landfill type
- Communication method : NB-IoT, UART
- MCU : 16bit Programmable
- Power : 3.6V 19000mAh Lithium Battery
- Transmission Output : 23dBm
- Waterproof rating : IP 68
- Size : 46(D)x113(W)x137(H) mm

Wire Display-type terminal (for Digital water meter)



- Wired connection to Digital water meter
- Remote communication is not supported
- Installation in a location easy for reading (outdoor)
- Field worker visual inspection (non-contact inspection)
- Wireless Automatic Smart meter reading pre-step solution
- Communication method : UART, TTL type
- MCU : Low Power MCU
- Power : 3.6V Lithium Battery
- Waterproof rating : IP 67
- Size : 40(D)x115(W)x170(H) mm

Electronic automatic constant temperature and humidity test chamber for testing freeze proof water meter

● MW Type : 15(13), 20, 25, 32, 40, 50mm

- Waterworks Headquarters Waterworks Research Institute's Performance Test of Manual Metrology to Prevent Freezing (a product that is cooled for 48 hours at -20°C and repeatedly passed 16 times of hot water thawing)
- Digital Water Meter Electromagnetic Discharge and Performance Test



Freezing test



Constant temperature and humidity test chamber

Multi-jet dry Digital water meter
(freezing test passed product)



Multi-jet wet water meter
(freezing test passed product)



Multi-jet-dry water meter
(freezing test passed product)



Dry water meter/hot water meter for remote heating (long and short length)

●MD Dry Type : 15, 20, 25mm

The remote heating hot water meter is used for apartments, officetels, shopping malls, etc
It is used in heating systems using hot water circulation.



long for remote heating
hot water meter 110 mm



Hot water meter single
pack length 110 mm



Bokjang Hot Water
Meter Length 165 mm

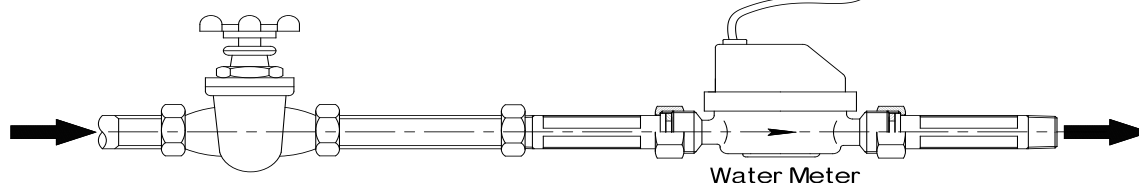
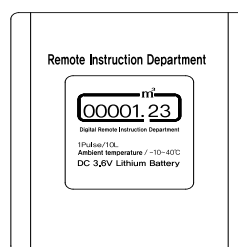
It is convenient to install and construct even in a narrow space and can prevent accidents such as freezing.



Remote water meter length 110 mm



Dry monogap water meter length 110 mm



Water Meter

Field piping installation example

Union pipe nut piping (dimension)



Water Angle Decompression Valve
Digital Water Meter Piping Assembly



Water Angle Decompression Valve
Water Meter Piping Assembly



Water Angle Pressure Reduction Valve
MD Water Meter Piping Assembly



Water Angle Pressure Reduction Valve
MD Cold Water Meter Piping Assembly

Union Pipe Nut For Piping (Dimension)



Union Pipe Nut For Piping (Dimension)



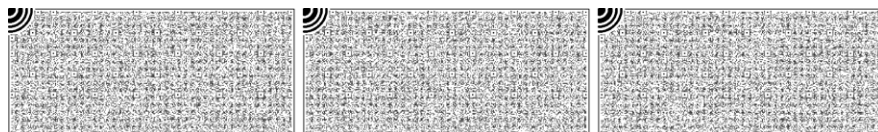
Certificate of Business Registration

(1 / 1)

【국세청민원사무처리규정 제6호 서식】(2024.4.17.개정)



발급번호 Issuance Number	사업자등록증명 Certificate of Business Registration (법인사업자) (Corporate Taxpayer)		처리기간 Processing Time
2415-348-8176-781			즉시 Immediately
상호(법인명) Name of Business	(주) 대한스마트미터 DAEHAN SMART METER CO.,LTD. (809-81-01671)		
사업자등록번호 Business Taxpayer ID Number	809-81-01671		
성명(대표자) Name of Representative	김수경 KIM SOO KYOUNG (124411-0250530)		
대표유형 Type of Representation	단독대표(Sole Representation)		
주민(법인)등록번호 Resident(Corporation) Registration Number	124411-0250530		
사업장소재지 Business Address	경기도 김포시 대곶면 상마산기로 81-35 Ga-dong 1st floor, Na-dong 1st floor, Da-dong 2nd floor, 81-35, Sangmasangiro-ro, Daegot-myeon, Gimpo-si, Gyeonggi-do, Republic of Korea		
개업일 Date of Business Start	2019년(Year) 12월(Month) 11일(Day)		
사업자등록일 Date of Business Registration	2019년(Year) 12월(Month) 17일(Day)		
업태 Business Type	제조업/제조업 Manufacturing/Manufacturing		
종목 Business Item	수도미터 및 적산열량계 Manufacture of other measuring, testing, navigating, control instrumensts n.e.c. 감압밸브 및 수도용 앵글밸브 Casting of copper		
공동사업자 Joint Business Owner	성명(법인명) Name of Resident/Name of Business	주민(사업자)등록번호 Resident Number/Business Taxpayer ID Number	
	해당사항 없습니다 (No Data)		
위와 같이 증명합니다. I certify that above information is true and correct to the best of my knowledge and belief. ※ 위 내용은 발급일 현재 상황으로서 추후 변경될 수 있습니다. This information is true as of the issuance date of this certification and but maybe subject to change in the future. ※ 영문 임의 기재사항[상호, 성명(대표자), 업태, 종목, 상세주소]은 실제적 권리관계를 증명하는 효력이 없습니다. Arbitrary data written in English [Name of Business, Name of Representative, Business Address, Business Type, and Business Item] do not hold a power to prove substantive rights and responsibilities.			
접수번호 Receipt No.	504103990570		
담당부서 Department	민원봉사실 Taxpayer Assistance Center		
담당자 Staff in Charge			
연락처 Telephone No.	+82-32-934-1492		
		2024 년(Year) 8 월(Month) 1 일(Day)	김포세무서장 Head of Gimpo District Tax Office (Stamp)



본 증명서 위·변조 여부는 발급일로부터 90일 이내 「국세청 홈택스(www.hometax.go.kr) 또는 모바일 홈택스 > 민원증명(증명발급) > 민원증명 원본확인」에서 발급번호로 확인, 또는 문서 하단의 바코드로 확인이 가능합니다.
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원본대조필



Patent certificate (water meter)

CERTIFICATE OF PATENT

Patent Number 10-1752860

Application Number 10-2016-0092628

Filing Date 2016. 07. 21.

Registration 2017. 06. 26.

Title of the Invention
WATER METER

Patentee
Patentees are filled out in a registration page.

Inventor
KIM Jong Bok
(Guro-dong) 2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

**This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.**

원본대조필 

2025. 05. 28.

 Check your current registration with QR code


특허청
Korean Intellectual Property Office

COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

김완기 

Patent certificate (water meter)

REGISTRATION DETAILS

Registration 10-1752860

Patentees

DAE HAN INDUSTRY CO., LTD.(110111-***)**

81-35, Sangmasingi-ro, Daegot-myeon, Gimpo-si, Gyeonggi-do,
Korea

DAE HAN MEASURING CO., Ltd.(124411-***)**

Ga-dong 1st floor, Na-dong 2nd floor, Na-dong 3rd floor, Da-dong
1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si,
Gyeonggi-do, Korea

DAEHAN SMART METER CO., LTD.(124411-***)**

Na-dong 1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup,
Gimpo-si, Gyeonggi-do, Korea

SAM WON INDUSTRY CO., LTD.(110111-***)**

2nd floor, 81-35, Sangmasingi-ro, Daegot-myeon, Gimpo-si,
Gyeonggi-do, Korea

HANYOUNG. INC(160111-***)**

38-7, Durumeori-gil, Sapgyo-eup, Yesan-gun, Chungcheongnam-do,
Korea

원본대조필



Patent Certificate (Digital Water Meter)

CERTIFICATE OF PATENT

Patent Number **10-2413107**
Application Number **10-2022-0006540**
Filing Date **2022. 01. 17.**
Registration **2022. 06. 21.**



Title of the Invention

DIGITAL WATER METER

Patentee

Patentees are filled out in a registration page.

Inventor

KIM Suk Tae

2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.

원본대조필



2025. 05. 28.



Check your current
registration with QR code



특허청

Korean Intellectual
Property Office

COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

김완기



Patent Certificate (Digital Water Meter)

CERTIFICATE OF PATENT

Patent Number 10-2413107

Application Number 10-2022-0006540

Filing Date 2022. 01. 17.

Registration 2022. 06. 21.

Title of the Invention

DIGITAL WATER METER

Patentee

Patentees are filled out in a registration page.

Inventor

KIM Suk Tae

2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

**This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.**

2025. 05. 28.



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registration with QR code

원본대조필



COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

김완기



Patent certificate (Vertical Waltman type water meter)

CERTIFICATE OF PATENT

Patent Number **10-2433655**

Application Number **10-2022-0015425**

Filing Date **2022. 02. 07.**

Registration **2022. 08. 12.**



Title of the Invention

WATER METER OF VERTICAL WALTMAN TYPE

Patentee

DAE HAN MEASURING CO., Ltd.(124411-***)**

Ga-dong 1st floor, Na-dong 2nd floor, Na-dong 3rd floor, Da-dong 1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

Inventor

KIM Suk Tae

2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

**This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.**

원본대조필



2025. 05. 28.



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특허청

Korean Intellectual
Property Office

COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

김 완 기



Patent certificate (ultrasonic water meter)

CERTIFICATE OF PATENT

Patent Number 10-2557470
Application Number 10-2022-0176223
Filing Date 2022. 12. 15.
Registration 2023. 07. 14.



Title of the Invention

ULTRASONIC WATER METER

Patentee

DAE HAN MEASURING CO., Ltd.(124411-***)**

Ga-dong 1st floor, Na-dong 2nd floor, Na-dong 3rd floor, Da-dong 1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

Inventor

KIM Suk Tae

2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

**This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.**

원본대조필



2025. 05. 28.



Check your current
registration with QR code



특허청

Korean Intellectual
Property Office

COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

김완기



Patent certificate (Digital integrated water meter with remote meter reading terminal)

CERTIFICATE OF PATENT

Patent Number 10-2557469

Application Number 10-2022-0105544

Filing Date 2022. 08. 23.

Registration 2023. 07. 14.

Title of the Invention

Meter reading terminal integrated with digital water meter

Patentee

Patentees are filled out in a registration page.

Inventor

KIM Suk Tae
2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.

원본대조필

2025. 05. 28.

COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

김완기

특허청
Korean Intellectual
Property Office

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registration with QR code

Patent certificate (Digital integrated water meter with remote meter reading terminal)

REGISTRATION DETAILS

Registration **10-2557469**

Patentees

DAE HAN MEASURING CO., Ltd.(124411-***)**

Ga-dong 1st floor, Na-dong 2nd floor, Na-dong 3rd floor, Da-dong 1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

DAE HAN INDUSTRY CO., LTD.(110111-***)**

81-35, Sangmasingi-ro, Daegot-myeon, Gimpo-si, Gyeonggi-do, Korea

SAM WON INDUSTRY CO., LTD.(110111-***)**

2nd floor, 81-35, Sangmasingi-ro, Daegot-myeon, Gimpo-si, Gyeonggi-do, Korea

DAEHAN SMART METER CO., LTD.(124411-***)**

Na-dong 1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

TaeKyung M-tech Co.,Ltd(124411-***)**

Part of Ga-dong 1st floor, Part of Na-dong 2nd floor, Da-dong 2nd floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

원본대조필



Patent certificate (Remote meter reading terminal)

CERTIFICATE OF PATENT

Patent Number 10-2713963
Application Number 10-2024-0032129
Filing Date 2024. 03. 06.
Registration 2024. 09. 30.



Title of the Invention

REMOTE METER READING TERMINAL

Patentee

Patentees are filled out in a registration page.

Inventor

KIM Suk Tae
2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

원본대조필



**This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.**



특허청
Korean Intellectual
Property Office

2025. 05. 28.



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registration with QR code

COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

김완기



Patent certificate (Remote meter reading terminal)

REGISTRATION DETAILS

Registration **10-2713963**

Patentees

DAE HAN MEASURING CO., Ltd.(124411-***)**

Ga-dong 1st floor, Na-dong 2nd floor, Na-dong 3rd floor, Da-dong 1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

DAE HAN INDUSTRY CO., LTD.(110111-***)**

81-35, Sangmasingi-ro, Daegot-myeon, Gimpo-si, Gyeonggi-do, Korea

SAM WON INDUSTRY CO., LTD.(110111-***)**

2nd floor, 81-35, Sangmasingi-ro, Daegot-myeon, Gimpo-si, Gyeonggi-do, Korea

DAEHAN SMART METER CO., LTD.(124411-***)**

Na-dong 1st floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

TaeKyung M-tech Co.,Ltd(124411-***)**

Part of Ga-dong 1st floor, Part of Na-dong 2nd floor, Da-dong 2nd floor, 100, Hwanggeum-ro 89beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Korea

원본대조필



Patent certificate (Terminal integrated water meter)

CERTIFICATE OF PATENT

Patent Number 10-2763076
Application Number 10-2024-0120261
Filing Date 2024. 09. 04.
Registration 2025. 01. 31.



Title of the Invention

TERMINAL INTEGRATED WATER METER

Patentee

Patentees are filled out in a registration page.

Inventor

KIM Suk Tae
2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

**This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.**

원본대조필



2025. 05. 28.



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Korean Intellectual
Property Office

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KOREAN INTELLECTUAL PROPERTY OFFICE

김완기



Patent certificate (Terminal integrated water meter)

CERTIFICATE OF PATENT

Patent Number 10-2763076

Application Number 10-2024-0120261

Filing Date 2024. 09. 04.

Registration 2025. 01. 31.

Title of the Invention

TERMINAL INTEGRATED WATER METER

Patentee

Patentees are filled out in a registration page.

Inventor

KIM Suk Tae

2-7, Gamasan-ro 12-gil, Guro-gu, Seoul, Korea

**This is to certify that, in accordance with the Patent Act,
a patent for the invention has been registered at the Korean Intellectual
Property Office.**

2025. 05. 28.



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원본대조필



김완기



Korea Standard Certificate (water meter for cold water)

KTC21-0035

[정기심사만료일 : 2026년 12월 26일]



제 품 인 증 서

1. 제조업체명 : (주)대한스마트미터
2. 대표자성명 : 김수경
3. 공장 소재지 : 경기도 김포시 대곶면 상마신기로 81-35
4. 인증제품
 - 가. 표준명 : 냉수용 수도미터 — 제1부: 계량 및 기술요건
 - 나. 표준번호 : KSB50049-1
 - 다. 종류·등급·호칭 또는 모델 :
 - 이면기재 끝.

「산업표준화법」 제17조제1항에 따른 인증심사를 한 결과 한국산업표준(KS)과 인증심사기준에 적합하므로, 「산업표준화법」 제15조 및 같은 법 시행규칙 제10조 제1항에 따라 위와 같이 한국산업표준(KS)에 적합함을 인증합니다.

2024년 02월 21일

원본대조필



한국기계전기전자시험연구원
Korea Testing Certification Institute



1. 최초인증일 : 2021년 03월 10일
2. 최종변경일 : 2024년 02월 21일 (소재지변경, 공장이전심사일 : 2023년 12월 27일)

Quality Management System Certificate



CERTIFICATE OF REGISTRATION

DAEHANSMARTMETER Co., Ltd.

81-35, Sangmasingi-ro, Daegot-myeon, Gimpo-si, Gyeonggi-do, Korea.

Korea SMEs & Startups Registrar certifies that the Quality Management System of the above organization has been assessed and found to be in accordance with the requirements of the scope of certification detailed below

Certificate No. : QMS-4304

원본대조필



Standards : KS Q ISO 9001:2015 / ISO 9001:2015

Valid : 2023.04.24 ~ 2026.04.23 (Initial Registration Date : 2020.04.24)

Scope of Supply : The Design·Development and Manufacture of Water Meters Intended for the Metering of Cold Potable Water, Hot Water Meters, Digital Water Meters Intended for the Metering of Cold Potable Water, Digital Hot Water Meters, Pressure Reducing Valve for Water Supply, Flowmeter and Water Gauge, Faucets, Union Pipe Nut, Strainer

10 November 2023

This certificate has been re-issuance due to the change of address, the change of certification scope



KAB-QC-09

KOSRE
Korea SMEs & Startups Registrar

Um Jinyeop
CEO & President

Accredited by Member of the International Accreditation Forum Multilateral Recognition Arrangement for Quality Management System.
KOSRE Certification Institute was recognized by the KAB as a quality management system certification institution (Recognized number: KAB-QC-09)

Sanitary Safety Standards Certificate (Water meter)

출력일: 2025년 03월 06일

(앞쪽)

위생안전기준 인증서

1. 인증번호 : KCW-2020-0183
2. 제조업체명 : (주) 대한스마트미터
3. 대표자 : 김수경
4. 본사 주소 : (10043) 경기도 김포시 대곶면 상마신기로 81-35, 경기도 김포시 대곶면 상마신기로 81
5. 공장 소재지 : (10043) 경기도 김포시 대곶면 상마신기로 81-35, 경기도 김포시 대곶면 상마신기로 81
6. 제품명 : 수도미터
7. 용도 : ☐ 표충용재료 ☐ 말단급수설비
☒ 급수설비 ☐ 일반수도용자재

「수도법」 제14조제1항 및 「수도용 자재와 제품의 위생안전기준 인증 등에 관한 규칙」 제8조제1항에 따라 위생안전기준 인증서를 발급합니다.

2020년 09월 25일

한국물기술인증원장



210mm×297mm[보존용지 120g/㎡]

사실과 상하없음



Type Approval Certificate (Multi-jet Dry Digital)

■ 계량에 관한 법률 시행 규칙 [별지 제 11호서식]

문서관리번호 : 2XRB-BY0R-RGG2

형식승인번호 제 KTC-I-20-72-14 호

1 / 5

형식승인서

1. 상 호 : (주) 대한스마트미터
2. 성명(대표자) : 김수경 사업자등록번호 : 809-81-01671
3. 사업장 소재지 : 경기도 김포시 대곶면 상마신기로 81-35
4. 공장 소재지 : 경기도 김포시 대곶면 상마신기로 81-35
5. 계량기의 종류 : 수도미터
6. 규격 및 형식 : [별첨]

7. 형식승인가준명 및 고시번호 : 수도미터 기술기준 산업통상자원부 고시 제2022-167호(2022.10.14)

위 계량기는 「계량에 관한 법률」 제14조제1항 및 같은 법 시행규칙 제15조 제1항에 따라 위와 같이 형식을 승인합니다.

2025년 04월 18일

한국기계전기전자시험연구원



※ 형식승인 변경내역 별지 기재.

원본대조필



Type Approval Certificate (Multi-jet Dry Mechanical)

■ 계량에 관한 법률 시행 규칙 [별지 제 11호서식]

문서관리번호 : W096-6C89-T4RZ

형식승인번호 제 KTC-I-20-229-05 호

1 / 4

형식승인서

1. 상 호 : (주) 대한스마트미터
2. 성명(대표자) : 김수경 사업자등록번호 : 809-81-01671
3. 사업장 소재지 : 경기도 김포시 대곶면 상마신기로 81-35
4. 공장 소재지 : 경기도 김포시 대곶면 상마신기로 81-35
5. 계량기의 종류 : 수도미터
6. 규격 및 형식 : [별첨]

7. 형식승인기준명 및 고시번호 : 산업통상자원부고시 제2022-167호 수도미터 기술기준

위 계량기는 「계량에 관한 법률」 제14조제1항 및 같은 법 시행규칙 제15조 제1항에 따라 위와 같이 형식을 승인합니다.

2023년 12월 01일

한국기계전기전자시험연구원



※ 형식승인 변경내역 별지 기재.

원본대조필



Type Approval Certificate (Multi-jet Wet Mechanical)

■ 계량에 관한 법률 시행 규칙 [별지 제 11호서식]

문서관리번호 : 260P-J2EW-RA0M

형식승인번호 제 KTC-I-20-52-09 호

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형식승인서

1. 상 호 : (주) 대한스마트미터
2. 성명(대표자) : 김수경 사업자등록번호 : 809-81-01671
3. 사업장 소재지 : 경기도 김포시 대곶면 상마신기로 81-35
4. 공장 소재지 : 경기도 김포시 대곶면 상마신기로 81-35
5. 계량기의 종류 : 수도미터
6. 규격 및 형식 : [별첨]

7. 형식승인기준명 및 고시번호 : 산업통상자원부고시 제2022-167호 수도미터 기술기준

위 계량기는 「계량에 관한 법률」 제14조제1항 및 같은 법 시행규칙 제15조 제1항에 따라 위와 같이 형식을 승인합니다.

2024년 11월 29일

한국기계전기전자시험연구원



※ 형식승인 변경내역 별지 기재.

원본대조필



Factory facility status



Electronic automatic water meter testbench 1,6
(Metrological Class horizontal R100 to R200) (15 to 50mm)



Electronic automatic water meter testbench 1,6
(Metrological Class horizontal R100 to R200) (15 to 50mm)



Water meter casting production processing facility



Plastic Injection molding facilities



water meter parts mold



Self-produced water meter exhibition hall

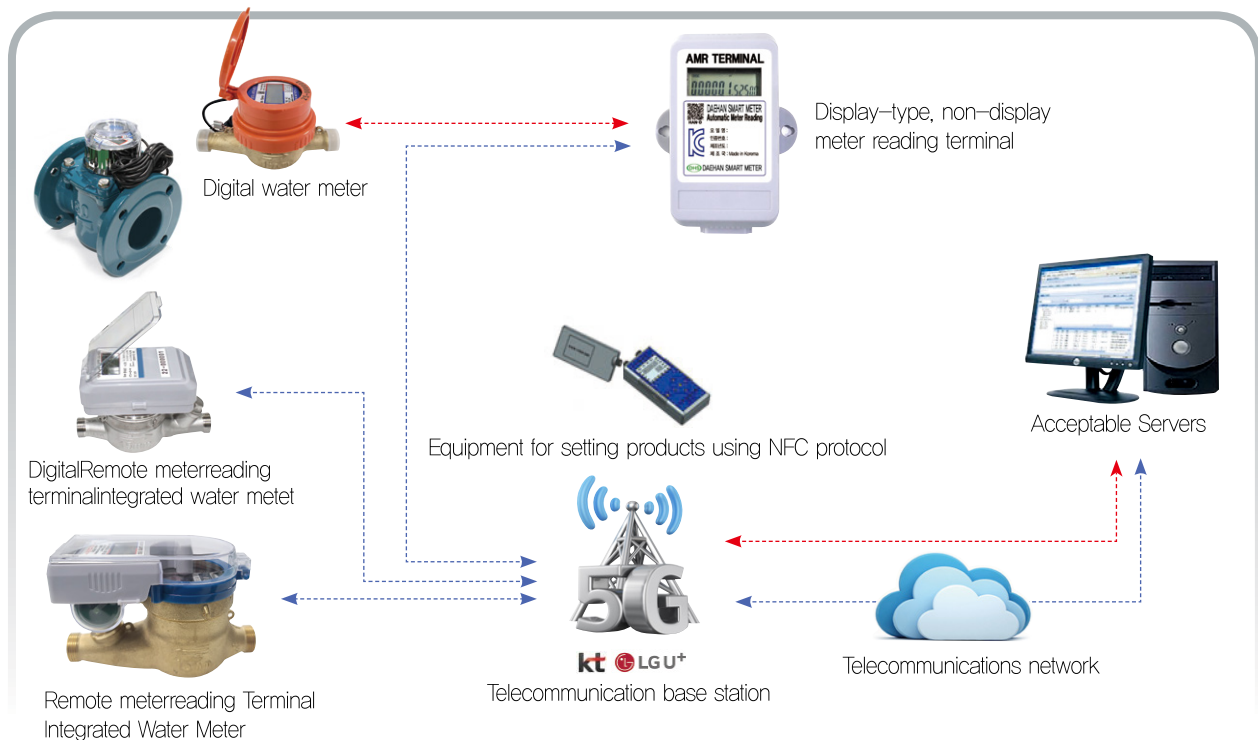


Self-produced water meter exhibition hall



Constant temperature and humidity test chamber
(for freezing prevent product)

Smart Remote meter reading solution (configuration diagram)



New Product New Technology Smart Water Meter Remote meter reading terminal-integrated water meter



Production item

- ▶ a remote water meter
- ▶ Freeze-proof water meters
- ▶ a counter-current water meter
- ▶ Dry sweet pack for hot and cold water
- ▶ Digital water meter terminal integrated
- ▶ Prevention of Backflow for Prevention of Freezing Electronic Water Meter
- ▶ a large water meter
- ▶ Stainless Steel Large Water Meter
- ▶ Hot water meter flow meter and water meter
- ▶ Stray built-in union
- ▶ Union pipes for water, nuts
- ▶ Remote meter reading terminal
- ▶ Direct Operation of the Water Pressure Relief Valve
- ▶ Dial Pressure Regulating Decompression Valve
- ▶ An angle-integrated pressure reducing valve for water supply
- ▶ ANGLE VALVE FOR WATER
- ▶ Directly operated angle valve integrated type for water supply

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