

Data sheet

flowIQ® Gateway

- Modular gateway for Kamstrup flowIQ® meters
- Integration to third party application with exchangeable plug-in communication modules
- Integration of pressure and sensor data in the Kamstrup meter data management system READY Manager
- Exchangeable batteries
- Up to 16 years battery lifetime



Contents

Application	2
Technical data	3
Material	3
Connections and inputs	4
Dimensional sketches	4
flowIQ® Gateway variants	5
flowIQ® Gateway configuration	6
Accessories	8

Application

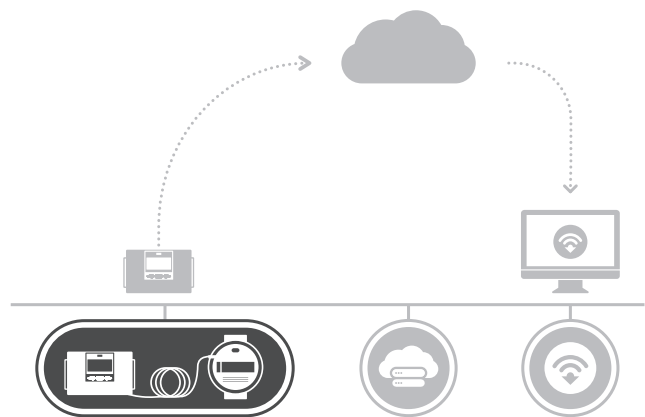
flowIQ® Gateway is a universal communication module gateway that connects to flowIQ® 2200/3200 meters via wired serial communication between the meter and the gateway.

flowIQ® Gateway works with popular industrial protocols such as Modbus, BACnet, LonWorks and even integrates to Kamstrup's own meter data management system REAdy Manager with Wireless M-Bus, P2P 2G/4G or linkIQ®.

flowIQ® Gateway features 2 communication module slots where one can be used for data transmission and the other for data collection and enables analog inputs 2 x 2...20 mA/0...10V for integration of sensor inputs. It is also possible to connect 3 x Pt500 temperature sensors and collect temperature data.

Installation and configuration

flowIQ® Gateway is easy to install and offers flexibility through programmable functions and plug-in modules that allow for optimum use in a wide range of applications. The gateway is configured from the factory and is ready for use. It can, however, be changed/reconfigured after installation via the front keys on the gateway, REAdy or METERTOOL.



Operation

flowIQ® Gateway automatically synchronizes data from the connected flowIQ® meter every 20 seconds. Data is forwarded via the installed communication module.

flowIQ® Gateway is powered by an internal D-cell lithium battery with a lifespan of up to 16 years or 2xA-cells lithium batteries with a lifespan of up to 9 years. Alternatively, the gateway can be mains-supplied, either by 24 VAC/VDC or 230 VAC.

What's in the box

- flowIQ® Gateway with ordered modules mounted
- Wall bracket and screws

Technical data

Electrical data

Battery

	3.65 VDC, D-cell lithium	3.65 VDC, 2xA-cell lithium
Battery lifetime	16 years at $t_{BAT} < 30\text{ °C}$	9 years at $t_{BAT} < 30\text{ °C}$

Note: The lifetime depends on the mounted communication module.

Mains supply

230 VAC +15/-30 %, 50/60 Hz
 24 VAC ±50 %, 50/60 Hz
 24 VDC +75/-25 % [24 VDC for High-Power SMPS only]

Power consumption

< 1 w

Insulation voltage

3.75 kV

Mechanical data

Protection class

IP65-rated

Dimensions

166 mm x 102 mm x 47 mm
 wall mount 74 mm x 58 mm

Weight

Approx. 450 g

Operating temperature

5 °C ... 55 °C, non-condensing closed location (indoor installation)

Storage temperature

-25 °C ... 60 °C

Operating humidity

0 % - 100 % non-condensing

Communication

2 x communication module slots

See flowIQ® Gateway variants table for details

Antenna

External/internal depending on the communication module

Optical interface

Configuration interface

Input

flowIQ® meter¹⁾

Proprietary Kamstrup communication
 flowIQ® 2200 module wM-Bus/linkIQ® 61/62
 flowIQ® 3200 module wM-Bus/linkIQ® 63/64

Cable (ordered separately)

1.5 m [5000491]
 7.5 m, can be shortened [5000493]

¹⁾ Volume 1, Flow 1 and info codes are forwarded to flowIQ® Gateway. flowIQ® meter temperature or Advanced Leak Detection (ALD) data is not forwarded from flowIQ® Gateway.

Material

Enclosure

Top and base

Thermoplastic, PC 10 % GF with TPE (thermoplastic elastomer)

Verification cover

ABS

Approvals

EU directives

Low Voltage Directive
 Electromagnetic Compatibility Directive
 Radio Equipment Directive
 RoHS Directive

flowIQ® Gateway variants

	Type 603								
Calculator type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pt500 2-wire t1-t2-t3 V1	Q								
Meter type									
Volume meter		8							
Country code									
flowIQ® Gateway (English)			WD						
Flow sensor connection type									
Prepared for one flowIQ® meter on V1				H					
Temperature sensor set									
No temperature sensors / can be ordered separately						00			
Supply									
No supply							0		
Battery, 1 x D-cell							2		
230 VAC high-power SMPS							3		
24 VAC/VDC high-power SMPS							4		
230 VAC power supply							7		
24 VAC power supply							8		
Battery, 2 x A-cells							9		
Communication module (2 module slots)									
No module							00	00	
Data Pulse, inputs (In-A, In-B)							10	10	
Data Pulse, outputs (Out-C, Out-D)							11	11	
Wired M-Bus, inputs (In-A, In-B)							20	20	
Wired M-Bus, outputs (Out-C, Out-D)							21	21	
linkIQ®/wM-Bus, inputs (In-A, In-B), EU							32	32	
linkIQ®/wM-Bus, outputs (Out-C, Out-D), EU							33	33	
Analog inputs 2 x 4...20 mA/0...10 V							41	41	
NB-IoT, inputs (In-A, In-B)							56	56	
LON TP/FT-10, inputs (In-A, In-B)							60	60	
BACnet MS/TP, inputs (In-A, In-B)							66	66	
Modbus RTU, inputs (In-A, In-B)							67	67	
2G/4G Network, inputs (In-A, In-B)							80	80	
Modbus/KMP TCP/IP inputs (In-A, In-B)							82	82	
REAdy Ethernet, inputs (In-A, In-B)							83	83	







flowIQ® Gateway configuration

	A	B	CCC	DDD	EE	FF	GG	L	M	N	PP	RR	T	VVVV
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3													
		4												
CCC-code														
flowIQ® interface			890											
Display														
flowIQ® Gateway				890										
					00									
Pulse inputs A and B														
100 m³/h, 100 l/imp, pre-counter 1						01	01							
50 m³/h, 50 l/imp, pre-counter 2						02	02							
25 m³/h, 25 l/imp, pre-counter 4						03	03							
10 m³/h, 10 l/imp, pre-counter 10						04	04							
5 m³/h, 5 l/imp, pre-counter 20						05	05							
2,5 m³/h, 2,5 l/imp, pre-counter 40						06	06							
1 m³/h, 1 l/imp, pre-counter 100						07	07							
10 m³/h, 10 l/imp, pre-counter 1 (default)						24	24							
5 m³/h, 5 l/imp, pre-counter 2						25	25							
2,5 m³/h, 2,5 l/imp, pre-counter 4						26	26							
1 m³/h, 1 l/imp, pre-counter 10						27	27							
1000 m³/h, 1000 l/imp, pre-counter 1						40	40							
Integration mode														
Controlled by flowIQ®								1						
									2					
Leakage limit, cold water (In-A/In-B)														
OFF											0			
30 minutes without pulses											1			
One hour without pulses											2			
Two hours without pulses											3			
											73			
											80			
											82			
											83			
											94			
											95			
											96			
											99			
To be continued on next page...														

flowIQ® Gateway configuration

	A	B	CCC	DDD	EE	FF	GG	L	M	N	PP	RR	T	VVVV
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Data logger profile														
Standard logger profile														10
linkIQ®														50
linkIQ® 2														51
Encryption level														
Encryption with separately forwarded key														3
Customer label														
Serial/Customer number 16 digits														0000
Blank														0001
Customer text 16 characters														0002

Accessories

Article number	Description	
Power supplies		
HC-993-02	Battery module with 1 x D-cell	
HC-993-03	230 VAC High-Power supply module	
HC-993-04	24 VAC/VDC High-Power supply module	
HC-993-07	230 VAC supply module	
HC-993-08	24 VAC supply module	
HC-993-09	Battery module with 2 x A-cells	
2006-681	Supply module label	
3130-269	Cable clamp with screws	
Cables		
5000-491	1.5 m cable for Pulse/flowIQ® Gateway	
5000-493	7.5 m cable for Pulse/flowIQ® Gateway	
5000-337	Module cable, 2 m [2 x 0.25 mm ²]	
6699-035	USB module configuration cable	
Bracket		
3026-207	Wall bracket	
6699-110	Panel bracket	
Antennas		
6699-448	Mini Triangle antenna for Wireless M-Bus and 2G/4G Network Module	
6699-482.E	Internal antenna for Wireless M-Bus 868 MHz	
2-wire Pt-500 sets of 3 temperature sensors		
65-00-0L0-000	3 pcs of Ø5.8 mm pocket sensors, 1.5 m cable	
65-00-0M0-000	3 pcs of Ø5.8 mm pocket sensors, 3.0 m cable	
65-00-0N0-000	3 pcs of Ø5.8 mm pocket sensors, 5.0 m cable	
65-00-0P0-000	3 pcs of Ø5.8 mm pocket sensors, 10.0 m cable	
66-00-0Q3-000	3 pcs of direct sensors, DS 27.5 mm, 1.5 m cable	
66-00-0Q4-000	3 pcs of direct sensors, DS 27.5 mm, 3.0 m cable	
Misc.		
6699-042	Metal plate for optical read-out head [20 pcs]	
6699-099	Infrared optical read-out head w/USB plug	
6699-724	METERTOOL HCW	
6699-725	LogView HCW	

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