



F-4300
APPLICATION & ORDERING GUIDE

ONICON's F-4300 Clamp-on Ultrasonic Flow Meter/ Thermal Energy Measurement System is the non-invasive approach to highly accurate hydronic flow measurement. The time-tested design incorporates matched transducers and easy to use mounting hardware making it ideal for installation in systems where shutdowns are impractical.

When provided with the BTU meter option, the F-4300 becomes a complete hydronic energy measurement system.



• Chilled Water • Heating Hot Water • Domestic Water • • Condenser Water •

We believe in our products, so should you.
1 YEAR NO FAULT WARRANTY
3 YEAR MANUFACTURER WARRANTY

Engineered • Wet Calibrated • Factory Configured

Measure with Confidence

No-Fault Warranty • On-Time Delivery • Customer Support

THEORY OF OPERATION

The ONICON F-4300 Clamp-on Ultrasonic Flow Meter/ Thermal Energy Measurement System utilizes the differential transit time method to measure the velocity of relatively clean liquids in full pipes. By measuring the difference between transit times of ultrasonic sound waves travelling between two transducers, the flow velocity and direction are accurately determined.

APPLICATION AND TRANSDUCER SELECTION

The ONICON F-4300 is suitable for a wide variety of hydronic and liquid flow applications.

- Chilled Water
- Heating Hot Water (≤250°F)
- Condenser Water - Closed Loop
- Condenser Water - Open Loop
- Domestic (Potable) Water
- Well Water
- Seawater
- Process Liquids
- Steam Condensate (Pumped)

The F-4300 transducers are selected based on pipe size, pipe material and wall thickness. The table below shows the transducer series recommendations based on the piping characteristics.

Pipe Size Range	Pipe Material	Pipe Wall Thickness/ Schedule	Transducer Series Selection
½" to 1-½"	Carbon Steel, PVC, HDPE Copper, Stainless Steel	All	10 Series
2" to 6"	Carbon Steel, PVC, HDPE Copper, Stainless Steel, Ductile Iron	All	20 Series
8" to 48"	Carbon Steel, PVC, HDPE Stainless Steel, Ductile Iron	All	30 Series

FLOW RANGES

The F-4300 has an operating range of 0.1 ft/s - 20 ft/s. The table below shows the corresponding volumetric ranges (GPM) by nominal pipe size.

OPERATING RANGE FOR 10 SERIES & 20 SERIES TRANSDUCERS	
PIPE SIZE (inches)	**FLOW RATE (GPM) (0.1 ft/sec - 20 ft/sec)**
½	0.06 - 12
¾	0.2 - 28
1	0.3 - 48
1¼	0.4 - 76
1½	0.6 - 110
2	1.0 - 200
2½	1.5 - 230
3	2.3 - 460
4	4.0 - 800
5	6.2 - 1,200
6	9.0 - 1,800

OPERATING RANGE FOR 30 SERIES TRANSDUCERS	
PIPE SIZE (inches)	**FLOW RATE (GPM) (0.1 ft/sec - 20 ft/sec)**
8	16 - 3,100
10	25 - 4,900
12	35 - 7,050
14	43 - 8,600
16	57 - 11,400
18	73 - 14,600
20	91 - 18,100
24	132 - 26,500
26	166 - 33,100
30	221 - 44,100
34	283 - 56,600
36	318 - 63,500
42	432 - 86,400
48	564 - 112,500

SPEED OF SOUND

The F-4300 utilizes the working fluids acoustic characteristics to take measurements. The table below shows the typical values or ranges for speed of sound in typical HVAC fluids.

LIQUID TYPE	SPEED OF SOUND (ft/s)	SPEED OF SOUND (m/s)
Water	4593	1400
Distilled Water	4915	1498
Propylene Glycol	5052-5577*	1540-1700*
Ethylene Glycol	4921-5577*	1500-1700*
*Value depends on percent solution		

ACCESSORY SELECTION



10 Series transducer with BNC connector and sealing jacket.



10 Series transducer with NEMA 6 (IP67) submersible connector, ideal for installations in wet locations.



20 Series transducer with BNC connector and sealing jacket.



30 Series transducer with NEMA 4 (IP66) threaded strain relief connector, ideal for installations in outdoor locations.

METER ORDERING INFORMATION

Meter Model Number Coding = F-4300-ABCD-EEFF-GG

A = Electronics Enclosure
1 = NEMA 4X Polycarbonate

B = Input Power
1 = 24 V AC/DC
2 = 110 - 240 VAC

C = Feature Set & I/O
1 = Flow only, one (1) AO, two (2) DO and RS485, BACnet or MODBUS
2 = Flow only, one (1) AO, two (2) DO and MODBUS TCP/IP [1]
3 = Flow and Energy, three (3) AO, three (3) DI, six (6) DO and RS485, BACnet or MODBUS
4 = Flow and Energy, three (3) AO, three (3) DI, six (6) DO and MODBUS TCP/IP [1]

D = Transducer Cable Length
1 = 25' transducer cable, BNC connector [2]
2 = 50' transducer cable, BNC connector [2]
3 = 100' transducer cable, BNC connector [2]
4 = 25' transducer cable, submersible connection (NEMA 6 - IP67) [3]
5 = 50' transducer cable, submersible connection (NEMA 6 - IP67) [3]
6 = 100' transducer cable, submersible connection (NEMA 6 - IP67) [3]
7 = 25' transducer cable, BNC connector, threaded strain relief (NEMA 4 - IP66) [4]
8 = 50' transducer cable, BNC connector, threaded strain relief (NEMA 4 - IP66) [4]
9 = 100' transducer cable, BNC connector, threaded strain relief (NEMA 4 - IP66) [4]

EEFF = Transducer Series & Installation Hardware
1212 = Includes pair of 10 Series transducer, 37 deg. w/ ½" to 1 ½" nom. pipe diameter SS mounting bracket
2221 = Includes pair of 20 Series transducer, 37 deg. w/ 2" to 6" nom. pipe diameter SS mounting bracket
3231 = Includes pair of 30 Series transducer, 37 deg. w/ 8" to 16" nom. pipe diameter SS mounting bracket
3232 = Includes pair of 30 Series transducer, 37 deg. w/ 18" to 48" nom. pipe diameter SS mounting bracket

GG = Temperature Sensor Selection
00 = Flow only
O1 = Matched pair of current (mA) based sensors, CHW/CW range [5]
O2 = Matched pair of current (mA) based sensors, HHW range [5]
R2 = Matched pair of 4 wire PT1000 RTDs, ½" to 2 ½" line size, 32°F to 250°F [5]
R3 = Matched pair of 4 wire PT1000 RTDs, 3" and larger line size, 32°F to 250°F [5]
S6 = Matched pair of PT100 current (mA) based sensors, -4°F to 104°F [5]

Notes
[1] MODBUS TCP/IP requires 24 VDC input power
[2] Only available for transducer series EEFF = 1212 and EEFF = 2221
[3] Only available for transducer series EEFF = 1212
[4] Only available for transducer series EEFF = 3231 and EEFF = 3232
[5] Only available for feature set C = 3 and C = 4

TEMPERATURE SENSOR INSTALLATION HARDWARE SELECTION

Temperature Sensor Type (GG=)	Sensor Diameter	Nominal Pipe Size Range	Available Installation Kits*		
			Dry Tap Kits	Hot Tap Kits	Clamp-On Kits
O1, O2 and S6 Current (mA) based sensors	0.25"	½" to 48"	INSTL0032-TSD INSTL0034-TSD INSTL0066-TSD INSTL0052-TSD INSTL0045-TSD INSTL0036-TSD INSTL0037-TSD INSTL0038-TSD INSTL0083-TSD INSTL0086-TSD INSTL0061-TSD	INSTL0033-TSH INSTL0035-TSH INSTL0060-TSH INSTL060A-TSH INSTL0065-TSH INSTL0040-TSH	INSTL0501-TSC INSTL0502-TSC
R2 PT1000 RTDs 32°F to 250°F	5mm	½" to 2-½"	INSTL4005-TSD INSTL4007-TSD INSTL4008-TSD INSTL4009-TSD	Not Available	Not Available
R3 PT1000 RTDs 32°F to 250°F	6mm	3" to 48"	INSTL4021-TSD	Not Available	Not Available

*Refer to Installation Hardware Selection Guide for details on kit components.

COMMONLY ORDERED MODEL NUMBERS AND DESCRIPTIONS FOR F-4300 FLOW METERS

CLICK HERE to complete the ONICON Order Form

Pipe Size Range	Pipe Material	Pipe Wall Thickness/ Schedule	Transducer Series Selection	Commonly Ordered Model Numbers and Descriptions	
½" to 1-½"	CS, PVC, HDPE Copper, SS	All	10 Series	**F-4300-1X11-1212-00**	Clamp-on u-sonic flow meter w/ NEMA 4X encl., 24V AC/DC OR 110 - 240 VAC power, (1) AO, (2) DO, RS485 & 25' of xdcr cable. Pr of 10S 37 deg. xdcrs & mntg. hdwe for 1/2-1-1/2" pipe.
2" to 6"	CS, PVC, HDPE Copper, SS, Ductile Iron	All	20 Series	**F-4300-1X11-2221-00**	Clamp-on u-sonic flow meter w/ NEMA 4X encl., 24V AC/DC OR 110 - 240 VAC power, (1) AO, (2) DO, RS485 & 25' of xdcr cable. Pr of 30S, 37 Deg xdcrs and mntg. hdwe for 5-10" pipe.
8" to 48"	CS, PVC, HDPE SS, Ductile Iron	All	30 Series	**F-4300-1X17-323X-00**	Clamp-on u-sonic flow meter w/ NEMA 4X encl., 24V AC/DC OR 110 - 240 VAC power, (1) AO, (2) DO, RS485 & 25' of cable w/ strain relief. Pr of 30S 37 deg. xdcrs & mntg. hdwe for 12-48" pipe.

Note
Power supply must be indicated at time of order, either 24 VAC/VDC or 110 - 240 VAC. All installation hardware will be provided with the meter.

COMMONLY ORDERED MODEL NUMBERS AND DESCRIPTIONS FOR F-4300 BTU (ENERGY) METER

CLICK HERE to complete the ONICON Order Form

Pipe Size Range	Pipe Material	Pipe Wall Thickness/ Schedule	Transducer Series Selection	Commonly Ordered Model Numbers and Descriptions	
½" to 1-½"	CS, PVC, HDPE Copper, SS	All	10 Series	**F-4300-1X31-1212-O1**	Clamp-on u-sonic flow & energy meter w/ NEMA 4X encl., 24V AC/ DC OR 110 - 240 VAC power, (3) AO, (3) DI, (6) DO, RS485 & 25' of xdcr cable. Pr of 10S 37 deg. xdcrs & mntg. hdwe. Matched pr. of (mA) based sens., CHW/CW.
				F-4300-1X31-1212-O2	Clamp-on u-sonic flow & energy meter w/ NEMA 4X encl., 24V AC/ DC OR 110 - 240 VAC power, (3) AO, (3) DI, (6) DO, RS485 & 25' of xdcr cable. Pr of 10S 37 deg. xdcrs & mntg. hdwe. Matched pr. of (mA) based sens., HHW to 200°F.
2" to 6"	CS, PVC, HDPE Copper, SS, Ductile Iron	All	20 Series	**F-4300-1X31-2221-O1**	Clamp-on u-sonic flow & energy meter w/ NEMA 4X encl., 24V AC/ DC OR 110 - 240 VAC power, (3) AO, (3) DI, (6) DO, RS485 & 25' of xdcr cable. Pr of 30S, 37 Deg xdcrs and mntg. hdwe. Matched pr. of (mA) based sens., CHW/CW.
				F-4300-1X31-2221-O2	Clamp-on u-sonic flow & energy meter w/ NEMA 4X encl., 24V AC/ DC OR 110 - 240 VAC power, (3) AO, (3) DI, (6) DO, RS485 & 25' of xdcr cable. Pr of 30S, 37 Deg xdcrs and mntg. hdwe. Matched pr. of (mA) based sens., HHW to 200°F.

Note
Power supply must be indicated at time of order, either 24 VAC/VDC or 110 - 240 VAC. All installation hardware will be provided with the meter (installation hardware for temperature sensors is provided separately).

COMMONLY ORDERED MODEL NUMBERS AND DESCRIPTIONS FOR F-4300 BTU (ENERGY) METER (CONTINUED)

CLICK HERE to complete the ONICON Order Form

Pipe Size Range	Pipe Material	Pipe Wall Thickness/ Schedule	Transducer Series Selection	Commonly Ordered Model Numbers and Descriptions	
8" to 48"	CS, PVC, HDPE SS, Ductile Iron	All	30 Series	**F-4300-1X37-323X-O1**	Clamp-on u-sonic flow & energy meter w/ NEMA 4X encl., 24V AC/ DC OR 110 - 240 VAC power, (3) AO, (3) DI, (6) DO, RS485 & 25' of cable w/ strain relief. Pr of 30S 37 deg. xdcrs & mntg. hdwe. Matched pr. of (mA) based sens., CHW/CW.
				F-4300-1X37-323X-O2	Clamp-on u-sonic flow & energy meter w/ NEMA 4X encl., 24V AC/ DC OR 110 - 240 VAC power, (3) AO, (3) DI, (6) DO, RS485 & 25’ of cable w/ strain relief. Pr of 30S 37 deg. xdcrs & mntg. hdwe. Matched pr. of (mA) based sens., HHW to 200°F.

Note
Power supply must be indicated at time of order, either 24 VAC/VDC or 110 - 240 VAC. All installation hardware will be provided with the meter (installation hardware for temperature sensors is provided separately).

CONFIGURATION AND APPLICATION CODE

The ONICON Application Code is an eight (8) digit number designed to make it easy to communicate the configuration information required to quickly and accurately calibrate and configure a meter for a specific application. Below are common ONICON selected application codes. These can be changed to meet your application requirements.

TABLE 1: CONFIGURATION & APP CODE FOR F-4300 FLOW METER IN IMPERIAL UNITS

IMPERIAL UNITS						
Nominal Pipe Size (inches)	**Mode**	**Full Scale Flow Rate**	**Volume Rate Unit**	**Volume Pulse Scaling**	**Volume Unit**	**Application Codes**
		**Flow settings below applied to all application codes*				
0.5	Flow-Single	10	GPM	1	Gallons	4301-0050
0.75	Flow-Single	20	GPM	1	Gallons	4301-0075
1	Flow-Single	35	GPM	10	Gallons	4301-0100
1.25	Flow-Single	55	GPM	10	Gallons	4301-0125
1.5	Flow-Single	75	GPM	10	Gallons	4301-0150
2	Flow-Single	125	GPM	10	Gallons	4301-0200
2.5	Flow-Single	180	GPM	10	Gallons	4301-0250
3	Flow-Single	280	GPM	100	Gallons	4301-0300
4	Flow-Single	500	GPM	100	Gallons	4301-0400
5	Flow-Single	800	GPM	100	Gallons	4301-0500
6	Flow-Single	1000	GPM	100	Gallons	4301-0600
8	Flow-Single	1900	GPM	1000	Gallons	4301-0800
10	Flow-Single	2500	GPM	1000	Gallons	4301-1000
12	Flow-Single	3500	GPM	1000	Gallons	4301-1200
14	Flow-Single	4500	GPM	1000	Gallons	4301-1400
16	Flow-Single	6000	GPM	1000	Gallons	4301-1600
18	Flow-Single	7000	GPM	1000	Gallons	4301-1800
20	Flow-Single	9000	GPM	1000	Gallons	4301-2000
24	Flow-Single	13000	GPM	10000	Gallons	4301-2400
28	Flow-Single	19000	GPM	10000	Gallons	4301-2800

TABLE 1: CONFIGURATION & APP CODE FOR F-4300 FLOW METER IN IMPERIAL UNITS (CONTINUED)

IMPERIAL UNITS						
Nominal Pipe Size (inches)	**Mode**	**Full Scale Flow Rate**	**Volume Rate Unit**	**Volume Pulse Scaling**	**Volume Unit**	**Application Codes**
		**Flow settings below applied to all application codes*				
30	Flow-Single	21000	GPM	10000	Gallons	4301-3000
32	Flow-Single	24000	GPM	10000	Gallons	4301-3200
36	Flow-Single	31000	GPM	10000	Gallons	4301-3600
42	Flow-Single	42000	GPM	10000	Gallons	4301-4200
48	Flow-Single	55000	GPM	10000	Gallons	4301-4800

TABLE 2: CONFIGURATION & APP CODE FOR F-4300 FLOW METER IN SI UNITS

SI UNITS						
Nominal Pipe Size (inches)	**Mode**	**Full Scale Flow Rate**	**Volume Rate Unit**	**Volume Pulse Scaling**	**Volume Unit**	**Application Codes**
		**Flow settings below applied to all application codes*				
0.5	Flow-Single	1	L/S	10	Liters	4302-0050
0.75	Flow-Single	2	L/S	10	Liters	4302-0075
1	Flow-Single	3	L/S	10	Liters	4302-0100
1.25	Flow-Single	4	L/S	10	Liters	4302-0125
1.5	Flow-Single	5	L/S	10	Liters	4302-0150
2	Flow-Single	8	L/S	100	Liters	4302-0200
2.5	Flow-Single	11	L/S	100	Liters	4302-0250
3	Flow-Single	18	L/S	100	Liters	4302-0300
4	Flow-Single	30	L/S	100	Liters	4302-0400
5	Flow-Single	45	L/S	100	Liters	4302-0500
6	Flow-Single	70	L/S	1000	Liters	4302-0600
8	Flow-Single	120	L/S	1000	Liters	4302-0800
10	Flow-Single	160	L/S	1000	Liters	4302-1000

TABLE 2: CONFIGURATION & APP CODE FOR F-4300 FLOW METER IN SI UNITS (CONTINUED)

SI UNITS						
Nominal Pipe Size (inches)	**Mode**	**Full Scale Flow Rate**	**Volume Rate Unit**	**Volume Pulse Scaling**	**Volume Unit**	**Application Codes**
		**Flow settings below applied to all application codes*				
12	Flow-Single	250	L/S	10000	Liters	4302-1200
14	Flow-Single	300	L/S	1	Cubic Meters	4302-1400
16	Flow-Single	400	L/S	1	Cubic Meters	4302-1600
18	Flow-Single	500	L/S	1	Cubic Meters	4302-1800
20	Flow-Single	600	L/S	10	Cubic Meters	4302-2000
24	Flow-Single	900	L/S	10	Cubic Meters	4302-2400
28	Flow-Single	1100	L/S	10	Cubic Meters	4302-2800
30	Flow-Single	1400	L/S	10	Cubic Meters	4302-3000
32	Flow-Single	1600	L/S	10	Cubic Meters	4302-3200
36	Flow-Single	2000	L/S	10	Cubic Meters	4302-3600
42	Flow-Single	2700	L/S	10	Cubic Meters	4302-4200
48	Flow-Single	3500	L/S	10	Cubic Meters	4302-4800

TABLE 3: CONFIGURATION & APP CODE FOR F-4300 BTU METER IN IMPERIAL UNITS (SINGLE MODE)

Mode	Digital Output 3	Digital Output 4	Digital Output 5 & 6	Digital Inputs 1, 2 & 3
Energy-Single	Alarm-Energy	Alarm-Flow	Not Configured	Available to accept pulses from auxiliary equipment

Nominal Pipe Size (inches)	Analog Output 1 Energy Rate		Analog Output 2 Volume Rate	Analog Output 3 Delta Temperature		Digital Output 1 Energy Total Pulse		Digital Output 2 Flow Total Pulse	Application Codes
0.5	100	KBTU/HR	See app code 4301-XXXX ***(Table 1)*** for flow rate information	100	°F	1	KBTU	See app code 4301-XXXX ***(Table 1)*** for flow total information	4305-0050
0.75	200	KBTU/HR		100	°F	1	KBTU		4305-0075
1	300	KBTU/HR		100	°F	1	KBTU		4305-0100
1.25	600	KBTU/HR		100	°F	10	KBTU		4305-0125
1.5	800	KBTU/HR		100	°F	10	KBTU		4305-0150
2	1500	KBTU/HR		100	°F	10	KBTU		4305-0200
2.5	2000	KBTU/HR		100	°F	10	KBTU		4305-0250
3	3000	KBTU/HR		100	°F	100	KBTU		4305-0300
4	5000	KBTU/HR		100	°F	100	KBTU		4305-0400
5	8000	KBTU/HR		100	°F	100	KBTU		4305-0500
6	10000	KBTU/HR		100	°F	100	KBTU		4305-0600
8	20000	KBTU/HR		100	°F	100	KBTU		4305-0800
10	25000	KBTU/HR		100	°F	100	KBTU		4305-1000
12	35000	KBTU/HR		100	°F	100	KBTU		4305-1200
14	45000	KBTU/HR		100	°F	100	KBTU		4305-1400
16	60000	KBTU/HR		100	°F	1000	KBTU		4305-1600
18	70000	KBTU/HR		100	°F	1000	KBTU		4305-1800
20	90000	KBTU/HR		100	°F	1000	KBTU		4305-2000
24	130000	KBTU/HR		100	°F	1000	KBTU		4305-2400
28	190000	KBTU/HR		100	°F	1000	KBTU		4305-2800
30	210000	KBTU/HR		100	°F	1000	KBTU		4305-3000
32	240000	KBTU/HR		100	°F	1000	KBTU		4305-3200
36	310000	KBTU/HR		100	°F	1000	KBTU		4305-3600
42	420000	KBTU/HR		100	°F	1000	KBTU		4305-4200
48	550000	KBTU/HR		100	°F	1000	KBTU		4305-4800

TABLE 4: CONFIGURATION & APP CODE FOR F-4300 BTU METER IN SI UNITS (SINGLE MODE)

Mode	Digital Output 3	Digital Ouput 4	Digital Output 5 & 6	Digital Inputs 1, 2 & 3
Energy-Single	Alarm-Energy	Alarm-Flow	Not Configured	Available to accept pulses from auxiliary equipment

Nominal Pipe Size (inches)	Analog Output 1 Energy Rate		Analog Output 2 Volume Rate	Analog Output 3 Delta Temperature		Digital Output 1 Energy Total Pulse		Digital Output 2 Flow Total Pulse	Application Codes
0.5	40	KW	See app code 4302-XXXX ***(Table 2)*** for flow rate information	55	°C	1	KWH	See app code 4302-XXXX ***(Table 2)*** for flow total information	4306-0050
0.75	70	KW		55	°C	1	KWH		4306-0075
1	100	KW		55	°C	1	KWH		4306-0100
1.25	200	KW		55	°C	1	KWH		4306-0125
1.5	300	KW		55	°C	1	KWH		4306-0150
2	400	KW		55	°C	10	KWH		4306-0200
2.5	600	KW		55	°C	10	KWH		4306-0250
3	900	KW		55	°C	10	KWH		4306-0300
4	1500	KW		55	°C	10	KWH		4306-0400
5	2500	KW		55	°C	10	KWH		4306-0500
6	3000	KW		55	°C	10	KWH		4306-0600
8	6000	KW		55	°C	10	KWH		4306-0800
10	7500	KW		55	°C	10	KWH		4306-1000
12	11000	KW		55	°C	10	KWH		4306-1200
14	14000	KW		55	°C	10	KWH		4306-1400
16	18000	KW		55	°C	100	KWH		4306-1600
18	21000	KW		55	°C	100	KWH		4306-1800
20	27000	KW		55	°C	100	KWH		4306-2000
24	39000	KW		55	°C	100	KWH		4306-2400
28	56000	KW		55	°C	1000	KWH		4306-2800
30	62000	KW		55	°C	1000	KWH		4306-3000
32	71000	KW		55	°C	1000	KWH		4306-3200
36	91000	KW		55	°C	1000	KWH		4306-3600
42	124000	KW		55	°C	1000	KWH		4306-4200
48	162000	KW		55	°C	1000	KWH		4306-4800

TABLE 5: CONFIGURATION & APP CODE FOR F-4300 BTU METER IN IMPERIAL UNITS (DUAL MODE)

Mode	Digital Output 3	Digital Ouput 4	Digital Output 5	Digital Output 6	Digital Inputs 1, 2 & 3
Energy-Dual	BTU Mode	Volume Mode 1	Volume Mode 2	Alarm - Energy	Available to accept pulses from auxiliary equipment

Nominal Pipe Size (inches)	Analog Output 1 Energy Rate		Analog Output 2 Volume Rate	Analog Output 3 Delta Temperature		Digital Output 1 Energy Total Pulse		Digital Output 2 Flow Total Pulse	Application Codes
0.5	100	KBTU/HR	See app code 4301-XXXX ***(Table 1)***for flow rate information	100	°F	1	KBTU	See app code 4301-XXXX ***(Table 1)***for flow total information	4309-0050
0.75	200	KBTU/HR		100	°F	1	KBTU		4309-0075
1	300	KBTU/HR		100	°F	1	KBTU		4309-0100
1.25	600	KBTU/HR		100	°F	10	KBTU		4309-0125
1.5	800	KBTU/HR		100	°F	10	KBTU		4309-0150
2	1500	KBTU/HR		100	°F	10	KBTU		4309-0200
2.5	2000	KBTU/HR		100	°F	10	KBTU		4309-0250
3	3000	KBTU/HR		100	°F	100	KBTU		4309-0300
4	5000	KBTU/HR		100	°F	100	KBTU		4309-0400
5	8000	KBTU/HR		100	°F	100	KBTU		4309-0500
6	10000	KBTU/HR		100	°F	100	KBTU		4309-0600
8	20000	KBTU/HR		100	°F	100	KBTU		4309-0800
10	25000	KBTU/HR		100	°F	100	KBTU		4309-1000
12	35000	KBTU/HR		100	°F	100	KBTU		4309-1200
14	45000	KBTU/HR		100	°F	100	KBTU		4309-1400
16	60000	KBTU/HR		100	°F	1000	KBTU		4309-1600
18	70000	KBTU/HR		100	°F	1000	KBTU		4309-1800
20	90000	KBTU/HR		100	°F	1000	KBTU		4309-2000
24	130000	KBTU/HR		100	°F	1000	KBTU		4309-2400
28	190000	KBTU/HR		100	°F	1000	KBTU		4309-2800
30	210000	KBTU/HR		100	°F	1000	KBTU		4309-3000
32	240000	KBTU/HR		100	°F	1000	KBTU		4309-3200
36	310000	KBTU/HR		100	°F	1000	KBTU		4309-3600
42	420000	KBTU/HR		100	°F	1000	KBTU		4309-4200
48	550000	KBTU/HR		100	°F	1000	KBTU		4309-4800

TABLE 6: CONFIGURATION & APP CODE FOR F-4300 BTU METER IN SI UNITS (DUAL MODE)

Mode	Digital Output 3	Digital Ouput 4	Digital Output 5	Digital Output 6	Digital Inputs 1, 2 & 3
Energy-Dual	BTU Mode	Volume Mode 1	Volume Mode 2	Alarm - Energy	Available to accept pulses from auxiliary equipment

Nominal Pipe Size (inches)	Analog Output 1 Energy Rate		Analog Output 2 Volume Rate	Analog Output 3 Delta Temperature		Digital Output 1 Energy Total Pulse		Digital Output 2 Flow Total Pulse	Application Codes
0.5	40	KW	See app code 4302-XXXX, ***(Table 2)*** for flow rate information	55	°C	1	KWH	See app code 4302-XXXX ***(Table 2)*** for flow total information	4310-0050
0.75	70	KW		55	°C	1	KWH		4310-0075
1	100	KW		55	°C	1	KWH		4310-0100
1.25	200	KW		55	°C	1	KWH		4310-0125
1.5	300	KW		55	°C	1	KWH		4310-0150
2	400	KW		55	°C	10	KWH		4310-0200
2.5	600	KW		55	°C	10	KWH		4310-0250
3	900	KW		55	°C	10	KWH		4310-0300
4	1500	KW		55	°C	10	KWH		4310-0400
5	2500	KW		55	°C	10	KWH		4310-0500
6	3000	KW		55	°C	10	KWH		4310-0600
8	6000	KW		55	°C	10	KWH		4310-0800
10	7500	KW		55	°C	10	KWH		4310-1000
12	11000	KW		55	°C	10	KWH		4310-1200
14	14000	KW		55	°C	10	KWH		4310-1400
16	18000	KW		55	°C	100	KWH		4310-1600
18	21000	KW		55	°C	100	KWH		4310-1800
20	27000	KW		55	°C	100	KWH		4310-2000
24	39000	KW		55	°C	100	KWH		4310-2400
28	56000	KW		55	°C	1000	KWH		4310-2800
30	62000	KW		55	°C	1000	KWH		4310-3000
32	71000	KW		55	°C	1000	KWH		4310-3200
36	91000	KW		55	°C	1000	KWH		4310-3600
42	124000	KW		55	°C	1000	KWH		4310-4200
48	162000	KW		55	°C	1000	KWH		4310-4800