

# ULTRASONIC ENERGY METER Serie IFX-03

## RESIDENTIAL ENERGY METER IFX Serie 03 - All in one

### Application

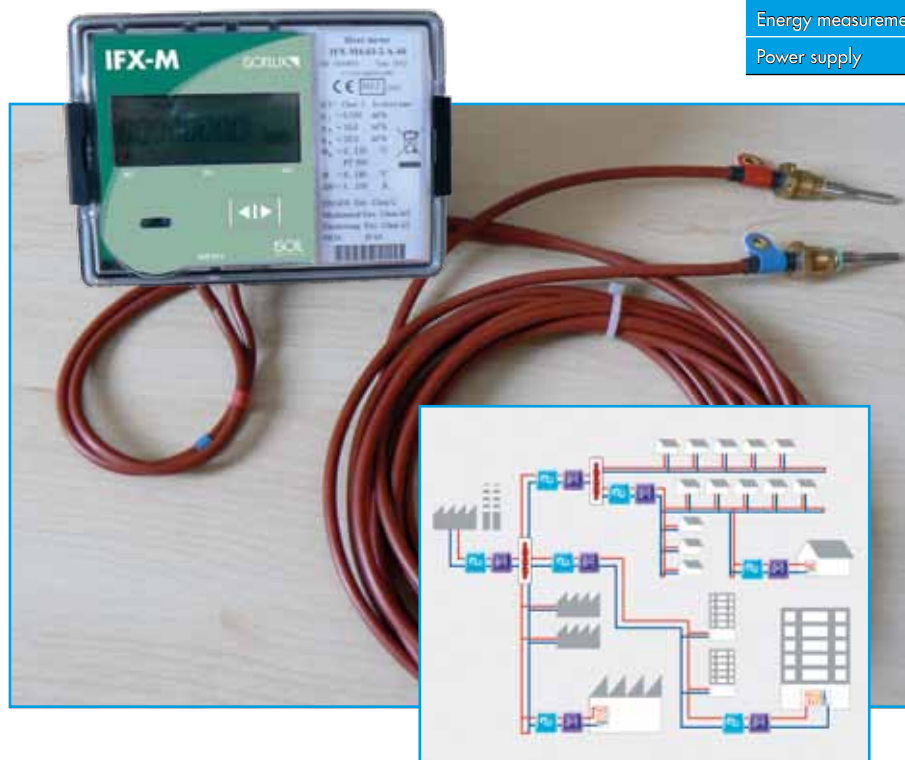
Ultrasonic heating and cooling energy meter **IFX-M4-03** is designed to measure and to record data in two separate registers.

It can be used for commercial metering of energy consumption for local or district heating systems: in domestic housing, office buildings, energy plants and similar projects.

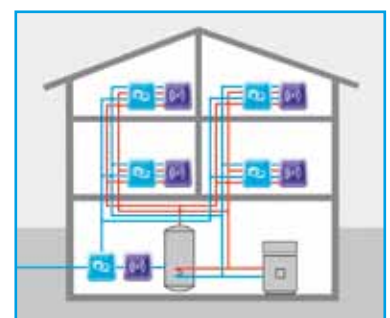
### Main features and advantages

- List of displayed parameters can be set by the user.
- Two universal pulse inputs / outputs available - can be used to connect additional pulse sources (for example - water meters), or as pulse outputs (for energy, volume values etc.).
- M-Bus, Current interface modules or wireless radio readout modules available.
- Tariff function available.
- Programmable monthly and yearly set days.
- Hourly, daily and monthly consumption values are stored in the internal data logger.
- Daily and monthly extreme (min/max) values with time stamps are recorded.
- Flow direction indication.
- The calculator can be mounted on the flow sensor or in other convenient location (on the rail, inside a hermetic enclosure or on the wall).

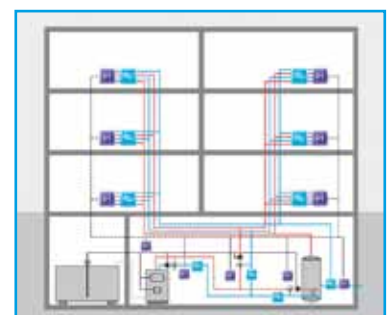
Flow measurement				
Flow measurement limits, mounting length and connection type:				
Connection type	Mounting length, mm	q <sub>r</sub> m <sup>3</sup> /h	q <sub>p</sub> m <sup>3</sup> /h	q <sub>v</sub> m <sup>3</sup> /h
G 3/4"	110	0,006	0,6	1,2
G 3/4"	110	0,015	1,5	3,0
G1"	130	0,025	2,5	5,0
G1 1/4"	260	0,035	3,5	7,0
G1 1/4"	260	0,06	6,0	12,0
G2"	300	0,100	10,0	20,0
DN50	270	0,15	15,0	30,0
Fluid temperature range		5 °C ... 130 °C, for q <sub>p</sub> ≤ 2,5 m <sup>3</sup> /h 10 °C ... 130 °C, for q <sub>p</sub> ≤ 3,5 m <sup>3</sup> /h		
Maximum permissible pressure		1,6 MPa		
Temperature measurement				
Fluid temperature		0 °C ... 180 °C		
Temp. difference measurement limits		2 ... 150 K or 3 ... 150 K		
Type of temperature sensors		Pt500 DS (q <sub>p</sub> ≤ 6 m <sup>3</sup> /h) or PL		
Connection scheme – two-wire, cable length up to 5 m				
Internal data logger capacity		up to 960 hours for hourly records up to 1116 days for daily records up to 36 months for monthly records		
External dimensions of the calculator		117 x 44 x 90 mm		
Protection class		IP65 (IP67 on request)		
Ambient temperature		5 °C to 55 °C		
Communication interfaces				
Optical communication interfaces		integrated, according to EN 61107 (IEC 1107)		
Available types of plug-in interface modules		M-bus; 2 pulse outputs; Wireless 868 MHz		
Accuracy class		2 (according to EN1434)		
Energy measurement units		kWh, MWh, GJ, Gcal		
Power supply		internal battery (lifetime not less than 11 years)		



Facilities (cities heating/refrigeration)



Commercial (offices, industrial, building automation)



Domestic (residential houses, condominium)