Electrical Data

Power Supply:	Battery, 3.6V, Lithium
Replacement Interval:	10 years at t_{BAT} <30°C
Network Power Supply:	Automatically switch to M-Bus or RS485 power if available to save battery
Power Consumption:	<0.2W
Standby Current:	<10uA
Backup Power Supply:	Internal SuperCap
Communication Interface:	M-Bus (default). Optional: RS485 with MODBUS support, optical isolated; Pulse, optical isolated, BACnet, Radio, GSM
CE approval:	EN61326-1:2006

Accuracy / MPE (Maximum Permissible Error)

MPE according to OIML R75, the whole system error is the combination of the following:

Calculator (Integrator):	$Ec = \pm (0.5 + 2/\Delta\Theta)$
Temperature Sensor:	$Et = \pm (0.5 + 4/\Delta\Theta)$
Flow Sensor:	$Ef = \pm (2 + 0.02\ qn/q)$

Here $\Delta\Theta$ is the temperature difference between the flow and return of the heat exchange circuit. q is the flow rate and qp is the nominal flow rate.

Calculator (Integrator)

Display:	LCD, 8 digits
Resolution:	999.99999 - 999999.99 - 99999999
Energy Unit:	KWh – MWh – GJ
Communication Protocol:	M-Bus (default). Optional: MODBUS

Temperature Measurement

Sensor Type:	Pt1000, 2-wire
Measurement Range:	0 -150°C (32-302°F)
Difference Range:	$\Delta\Theta$: 0.25K-80K
Permissible Temperature:	Θ: 2-60°C (35-140°F) for long term and up to 95°C (203°F) for short term
	High-temperature version up to 130°C (266°F) (upon request)

Mechanical Data

Metrological Class:	2 (according to OIML R75)
Environmental Class:	B/C
Electromagnetic Class:	E2
Environmental Temp:	0-55°C (32-131°F)
Enclosure Protection:	IP68
Integrator Detachable:	Yes
Pressure:	PN16
Flow Sensor Cable:	1.5m (up to 10m, upon request)
Temperature Sensor Cable:	1.5m (up to 10m, upon request)

Pressure Loss

The pressure loss of a flow sensor is proportional to the square on the flow: $\Delta p = k \times q2$

Here Δp is pressure loss, q is volume flow rate and k is the coefficient.

All meters have Δp less than 0.25bar at qp.