



Cyble™ Sensor ATEX

A Smart Pulse Transmitter for Gas Meters

The Cyble Sensor ATEX has been designed specifically for gas utilities needing to connect electronic devices with a LF pulse input, such as volume converters to a gas meter. It can be mounted at any time onto any Itron meter equipped with an Itron universal totaliser. It provides a completely flexible solution for current or future remote reading technologies.

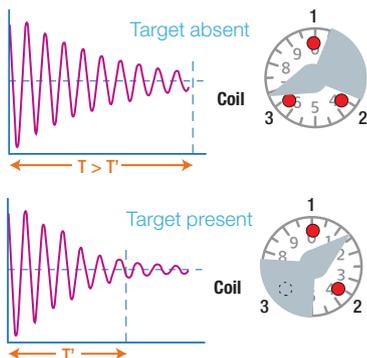
KEY BENEFITS

- » High reliability for remote reading.
- » Magnetic tampering is impossible.
- » Easily retrofittable (no breaking of seals) onto meters equipped with the Itron universal totaliser.
- » Long term experience: Since 1995, more than 5 M. modules in the field

PRINCIPLE OF OPERATION

The Cyble Sensor ATEX works as follows:

- » A Cyble target is fitted as a standard into the Itron universal totaliser. It rotates proportionally to the registered volume of gas.
- » 3 coils fitted in the Cyble Sensor ATEX detect the rotation of the target by measuring the change of induction in front of each coil.
- » An electronic board records the complete rotation of the target. This detects and compensates for any backflows: the meter index and remote register are identical. When a complete rotation is validated, a pulse is sent out at the output of the Sensor.



APPLICATIONS

The Cyble Sensor ATEX can be mounted onto the Itron Fluxi 2000/TZ, Delta and MZ meters.

It can be used to ensure reliable transmission of the non-corrected volume from the meter to the Itron Corus volume converter or to any volume converter using a standard low frequency input.

The Cyble M-Bus, RF and Coder presented are also available for other applications.

They can also be used to ensure a reliable remote reading of the meter.



Technical Specifications

Intrinsic safety approval	L.C.I.E. 06 ATEX 6044 X
Intrinsic safety level	II 1 G Ex ia IIC T3
Signal output	Ui ≤ 15 Volt Ii ≤ 900 mA No polarisation to be observed: wires white and yellow Type dry contact equivalent Anti-tampering (AT): wires grey and green.
Cable length	5 m
Power supply	Lithium battery - not replaceable Life time > 12 years (in normal applications within the specified temperature range)
Working temperature	-25°C to +55°C
Storage temperature	-25°C to +55°C
Protection	IP68
E.M.C standards	EN 61000-6-2, EN 61000-6-3, EN 60947-5-6

OTHERS TYPES OF CYBLE SENSORS AVAILABLE

Cyble Sensor 5 wires:

it provides the same functionalities as the Cyble Sensor ATEX and additionally has:

- » 1 signal for the flow direction
- » 1 pulse output without backflow compensation

Cyble M-Bus:

it can be used to integrate the Itron gas meters into a M-Bus network. In addition to the meter reading, Cyble M-Bus also provides smart functions such as database management.

It provides all relevant data compliant to EN 1434.

Cyble RF:

it provides all benefits of a wireless solution; higher data acquisition speed and complete accessibility to all meters even if the customer is absent.

Characteristics:

- » Protocol: RADIANT
- » Frequency carrier: 433.82 Mhz

Cyble SC:

Its serial communication provides an error free value of the meter index to be transmitted with the highest reliability to the volume converter or data logger.

Standards Compliance:

- » Namur according to EN 60947-5-6. Unidirectional ASCII protocol according to DVGW document.
- » L-Bus according to EN 13757-3 and EN 13757-6.



Fluxi 2000/TZ fitted with the universal totaliser and the Cyble Sensor ATEX

For more details about these 4 Cyble Sensors, please consult the relevant brochures online at www.itron.com



Universal totaliser fitted as standard with Cyble target

Installation of the Cyble Sensor ATEX onto the meter:



1) Mounting



2) Screwing



3) Sealing



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