



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.

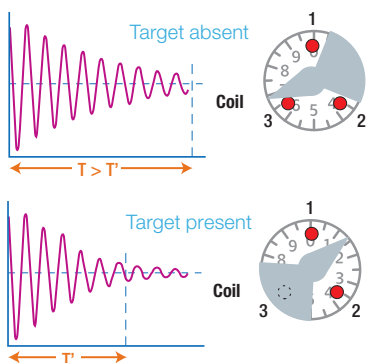
KEY BENEFITS

- » 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	Ex 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: RADIAN
- » 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

Installation of the Cyble Sensor ATEX onto the meter:



1) Mounting



2) Screwing



3) Sealing



Universal totaliser fitted as standard with Cyble target



Our company is the world's leading provider of smart metering, data collection and utility software systems, with over 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water.

To realize your smarter energy and water future, start here: www.itron.com

For more information, contact your local sales representative or agency:

ITRON GmbH

Hardeckstraße 2
D-76185 Karlsruhe
Germany

Phone: +49-721 5981 0

Fax: +49-721 5981 189