

ADMAG AXR®

Reduce Cost And Improve Performance



In industrial automation the two-wire technology has many advantages compared to four-wire devices. Unfortunately, there are some limitations with two-wire devices, with the main challenge being limited power supply to deliver performance at an acceptable level. Yokogawa has overcome this technology barrier by developing the AXR two-wire magmeter to deliver reliable and stable performance. That is providing great benefits to the industry

Lower installation costs

The biggest advantage of using a two-wire magmeter is the reduction of installation costs. The cost savings include:

1. Only one pair of cable is required. An extra power cable is not necessary. In a medium- or large-sized plant, the cost savings can be quite significant.
2. The two-wire AXR is a loop powered device. There is no need for a power supply or a backup power system (uninterruptible power supply).
3. Easy installation and connectivity to the control room and an overall reduction in labor costs.



Four-wire magmeter



Two-wire magmeter

Lower operating costs

A four-wire magmeter consumes an average of 10 to 20 watts of power. This is considerably more than a two-wire magmeter, which on average consumes approximately 0.2 watts. The lower power consumption also has the benefit of reducing annual CO₂ gas emissions from 73 kg to 1.4 kg.

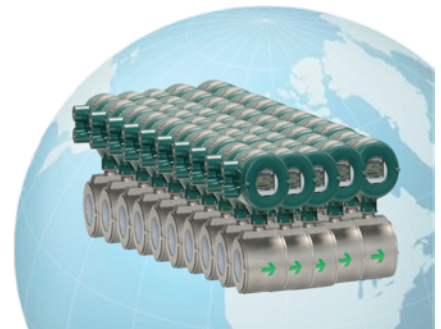
With its low power requirements, the AXR is ideal for use in remote locations, where power is supplied by solar panels.

Installed Cost Savings of Up to \$1,000 to \$2,000 per unit



Four-wire

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Two-wire

Replacement of traditional two-wire devices

Flow measurement in many plants is often still based on traditional technologies. The types of meters in use include turbine meters and differential pressure flowmeters with various types of primary flow elements creating pressure loss.

It may no longer be justifiable to use older measurement devices. Some are quite difficult to handle, are vulnerable to problems such as blockages, and require frequent maintenance.

These days, instrumentation engineers are trying to adapt or replace these older measurement technologies with new flow measurement technologies that provide better process visibility, reliability, accuracy and less pressure loss.

Consideration must be given to questions such as whether it is necessary to cut piping so that a new type of flowmeter can accommodate the process. One of the most difficult barriers to the implementation of newer technologies is the fact that many of these older flowmeters are of the two-wire type, and many times the applicable newer technologies are four-wire devices. Changing to a four-wire flowmeter entails significant added costs for power supplies and cabling. Though many two-wire flowmeters are



Traditional technology is not as accurate as new technology and requires more maintenance due to wear and tear on moving parts. With its two-wire technology, the ADMAG AXR magmeter presents an ideal replacement solution with no pressure loss. And with its short face to face length, pipe modifications can be kept to a minimum.

available, their performance tends not to be good enough to justify the cost of this replacement.

The AXR overcomes this problem. With its two-wire design and good reading stability, the AXR is the perfect solution for your application need. Sizes range from 25 mm (1") to 200 mm (8"), with various types of process connection such as ANSI, EN, and JIS flanges. A wafer type process connection with a short face to face length is also available, allowing you to minimize pipe modifications.