

Application note

PT900 check meter

Summary

In Northern China there are many water plants with lots of large electromagnetic flow meters. Per local regulation these need to be verified once a year. The verification is a cumbersome process, takes a lot time and money for the water plants.

Application

A plant operator needed a check meter that could install easily, without interrupting the flow, to assess the installed electromagnetic meter. The verification should obtain a measurement error between the two meters that stays within an acceptable $\pm 2\%$ error limit, then inline meter verification cycle can be extended to 2 years or more.

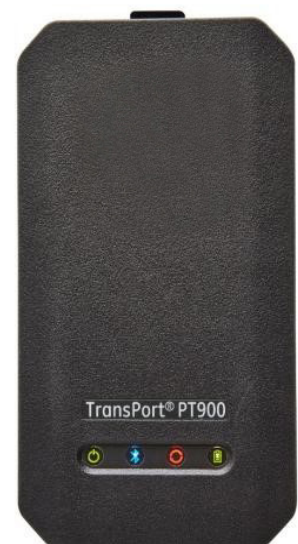
Challenge

The following features were required from the check meter:

1. Accuracy within $\pm 1\%$ of reading
2. Online data storage for a month
3. 2 channels

Benefits:

- Easy installation
- Wireless Operation
- Easy Data logging
- Panametrics designed systems maximize uptime



Solution

The Panametrics Transport PT900 clamp on flow meter was used with C-RS 401 transducer to verify a DN800 (32") Mag meter for a three-month period. The average difference between the meters were below 1.5%.

Total	Mag (M3/h)	UFM (M3/h)	Error%
3 Months	4039075.8	3988992.6	-1.2%

The customer was satisfied with Transport PT900 performance and ordered two additional units. The customer managed to reduce their maintenance budget while increased the plant availability and yield.



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