UIM Series UIM-4F Duo

Custody Transfer Measurement with Enhanced Condition-based Maintenance Capabilities

The UIM-4F Duo consists of two fully independent systems. The main measurement is done by the UIM-4F four path part. The three path system provides a secondary measurement and uses enhanced diagnostics to enable the user to perform condition-based maintenance. In addition, the UIM-4F Duo provides a wealth of information on the condition of the complete metering system.

Traditional setups utilise a secondary measurement with single or dual paths, usually resulting in an overly sensitive system causing false indications of potential application problems such as fouling, flow conditioner blockages etc. By using a three path secondary measurement, which is less sensitive to slight profile changes, the UIM-4F Duo provides the diagnostics needed to detect potential issues.

The UIM-4F Duo path layouts are significantly different as the paths are oriented at different chord locations. Therefore, common mode errors are not present as both meters respond differently to profile changes.
Features

• Two independent accurate fiscal flow measurements in a single flowmeter body.
• Primary flow measurement uses the highly accurate UIM-4F four path chordal configuration, meeting AGA-9 and OIML R137 (class 0.5) international standards for custody transfer metering.
• Secondary flow measurement uses the UIM-3F three path chordal configuration, also highly accurate, and meeting AGA-9.
• Available in sizes from 8” and larger and flange ratings up to 900#.
• Each meter has the full range of versatile I/O of the UIM-4F and UIM-3F flowmeters, including optional pressure and temperature sensors for PTZ compensation.
• Extensive diagnostic information using TIMCare™ software.

Benefits

• Highly accurate fiscal flow measurement with continuous verification by the secondary measurement.
• An economical solution where a redundant measurement is required for monitoring and verification.
• A space saving compact package compared to installing a second meter for verification. Smaller skid sizes and lower installation costs.
• The four path primary measurement and three path secondary measurement ensure that common problems are detected. Two identical path configurations can miss common mode issues such as pipe blockage.
• Two fiscal measurements ensure that false alarms are avoided, as is often a problem when using sensitive one or two path secondary measurements.