



AVEVA

PRODUCT DATASHEET

AVEVA™ Measurement Advisor

State-of-the-art measurement data refinement

Gas gathering, transportation, and distribution companies must be able to accurately measure the volume and quality of the gas that is flowing through their pipelines to the ultimate gas users. They must also provide accurate measurement of gas delivered and sold at custody transfer points, which represents their key source of revenue. AVEVA Measurement Advisor is gas flow measurement software that enables pipeline operators to effectively measure gas flows through automated data acquisition, pre-financial verification, and correction of measurement field data.



The gas flowing through your pipelines is the lifeblood of your operations. Accurately measuring this flow is critical to your company's financial and regulatory performance. How do you collect, review, adjust and accurately report these measurements to withstand this intense scrutiny?

AVEVA is a world leader in developing innovative, real-time solutions to meet the requirements of the natural gas industry. With experience serving major gas suppliers on six continents, AVEVA truly offers global know-how. Leverage these capabilities to meet the needs of your company.

AVEVA Measurement Advisor provides the efficient and accurate means to configure devices and collect, validate, modify and reconcile your gas measurement data. Part of the AVEVA's suite of gas solutions, AVEVA Measurement Advisor is the high-mileage solution that gathers measurements for multiple pipelines interfacing with various EFM polling engines, SCADA systems, chart integrators, third-parties and manual input.

AVEVA Measurement Advisor simplifies precision measurement collection and reporting in real time.

Every step done precisely

AVEVA Measurement Advisor allows the precision required at every step to achieve process-wide accuracy.

Measurement Device Configuration – AVEVA

Measurement Advisor facilitates proper setup and maintenance of all measurement devices – necessary to assure the accuracy and utility of generated data and prevent errors from flowing through to subsequent processes. A full history of your measurement infrastructure is continuously available, allowing rapid identification of measurement issues; whether they are pervasive across a large area of your operations, specific to one device; related to configuration or exist in the flow records themselves.

AVEVA Measurement Advisor allows date/time effective modification of any device configuration, as well as physical and logical connectivity. It is easily configured to support your specific business information, without changing the application software.

Recent optimisations to the AVEVA Measurement Advisor meter database maximise overall storage capacity and allow you to expand the resolution of the meter fleet, supporting smaller measurement points such as industrial meters. This improved architecture also optimises system configuration and maintenance by centralising default object properties.



Data Collection – High-throughput data collection techniques retrieve and store measurements, converting them to standardised units of measure when required. As data is converted, stored and secured, the Data Collection module simultaneously initiates data validity processing. Recent enhancements include Irregular Metering functionality that detects gaps and overlaps in the start/end times of irregular readings, supporting industrial metering and other applications where metering is typically irregular.

Accuracy Confirmation – Processing begins by recalculating the data based on known device configuration and gas quality measurements received from the gas device interface. Calculations can be configured for each type of measurement device and adjusted when device configuration changes. AVEVA Measurement Advisor applies programmed validation rules to detect erroneous data, allowing analysts to attend to issues as measurement data arrives.

Factors such as telemetry failure, human error and mis-configured devices contribute to erroneous measurement data. AVEVA Measurement Advisor maintains a complete audit trail of all manual and automated edits required to make custody transfer data suitable for billing. Data precedence rules add power to simple edits by triggering high-speed recalculations of dependent data.

AVEVA Measurement Advisor provides comprehensive capabilities to check for missing or late data. Data can be added when available, or you can extrapolate and add missing data based on estimation rules you have created for each measurement device and external system. Estimation allows a full operational awareness of measured volumes on a continual basis. Measurement accuracy improves as actual values arrive and firm up the operational overview.

The aggregation engine continuously sums data to hourly, daily and monthly increments based on 15-minute, hourly and daily input readings. The system recalculates automatically if device configurations change, new values are retrieved or values are edited manually.

Calibration reviews the as-found/as-left readings that may have contributed to one or more of the previous corrections. Fine-tuning the measurement devices based on this analysis will, over time, minimise the need for future data corrections.

Closing the books

Balancing capabilities use a multi-level hierarchy to give segment and system-wide balances, allowing analysts to quickly identify mass, volume and energy in/out errors. Hourly, daily and monthly balances are readily available for displays, reports and interfaces.



The system also maintains complete hourly, daily and monthly physical balances, including line pack, fuel use and lost gas.

Closing functions simplify end-of-month responsibilities by immediately producing reports from the full accounting closing process after the arrival and validation of the final data each month. From an accounting practice standpoint, changes after closing are properly handled. Each prior period adjustment is marked accordingly, requires individual approval using a separate identity and is fully auditable.

The answer to your measurement and analysis needs

Gone are the days of infrequent measurements, processed in nightly batches and providing reports that are stale before they are generated.

AVEVA Measurement Advisor simplifies precision measurement collection and reporting in real time. Join your peer companies who rely on AVEVA Measurement Advisor to succeed in today's rapidly-changing, competitive pipeline industry.

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For more information, please visit our website at sw.aveva.com/operate-and-optimize/optimize-operations/measurement-advisor or speak with your AVEVA sales representative.