



AUTOMATED METER READING SYSTEM

PowerServe AMR Brochure

Cloud Based AMR Metering Systems

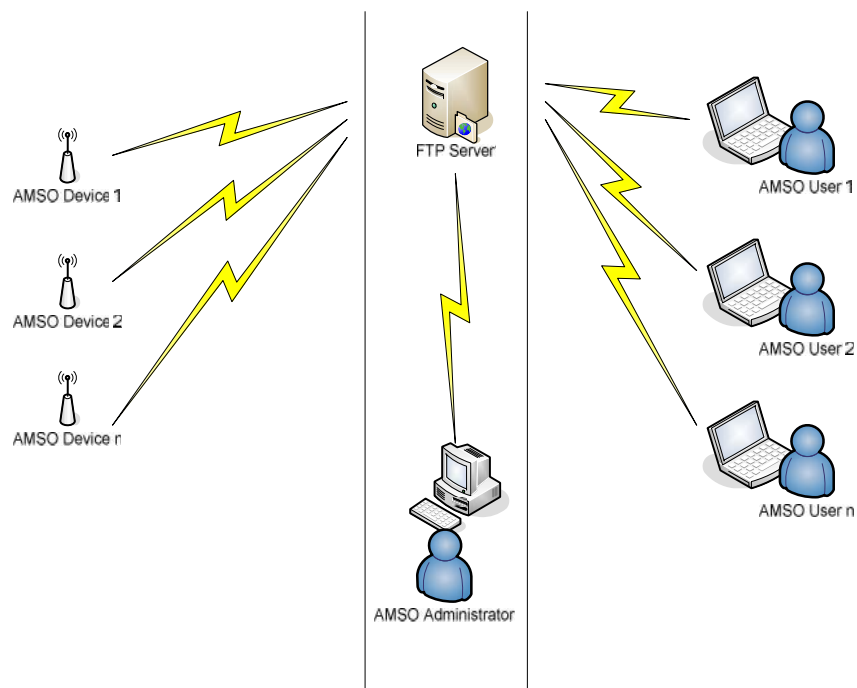
The rapid growth of electronic systems and communication capabilities combined with the information age presents the opportunity to fully integrate and automate utility metering using the remote and wireless capabilities of the internet and cloud based storage systems.

The *PowerServe XE* metering system combines the best in class electronic metering devices and cloud based data storage approaches to provide a remote metering solution that is maintenance free, accurate, on-time and provides import reports for numerous managing software packages. This functionality allows for seamless integration which eliminates manual errors and therefore ensures high recovery percentages and ensures that personal can conduct their business with flexibility and value-added functionality.

AMR

- Instantaneous Billing
- Various Report Formats
- Extensive Cloud based SQL Database
- Checks & Comparisons

The power of the system lies within the cloud based storage where readings for each meter/utility is stored on a daily basis and can be extracted for any given period. All on-site cabling and devices which is used for conventional AMR systems are therefore eliminated, which simplifies the system and therefore minimises damage and failures of hardware



The system fully automates readings, at any user-defined interval, directly from non-volatile registers inside the electronic billing devices. This approach eliminates all problems arising out of manually read meters. It further reduces processing time, reduces the cash cycle, guarantees data integrity and eliminates operator errors.

- **Communications Media**, The meters communicate via a GSM connection to the cloud based server, which in turn stores the readings in a SQL database.
- **Operation**, The system is fully automated. Takes normal readings once every user-specified period (daily), performs the month-end reads at the specified billing interval, process the billing data and provides instant reports for integration.

Meter Reading Detail

Meter Name	Description	Date From	Date To	Reading From	Reading To	Consumption	Site Description
B-001	Unit 1	2021/01/01	2021/02/01	140.6	277	136.4	Site X
B-002	Unit 2	2021/01/01	2021/02/01	959.4	1603.2	643.8	Site X

Customer Consumption Detail

Customer	Meter	Period	Readings	Cons	Unit Cost	Amount	Basic Charge	Sub Total	VAT	Total
Date :										
2021/02/01										
Body Corp										
General Areas										
	BV-001 DBE Lobby	2021/01/01 - 2021/02/01	140.6 - 277	136.4	2.82	R 384.47				
	BV-004 DB-B Services	2021/01/01 - 2021/02/01	1476.1 - 2851	1374.9	2.82	R 3 875.43				
	BV-015 DB-C Services	2021/01/01 - 2021/02/01	285.6 - 620.3	334.7	2.82	R 943.42				
	BV-006 DB-A Services	2021/01/01 - 2021/02/01	586 - 1122.9	536.9	2.82	R 1 513.36				
	BV-025 DB-D Services	2021/01/01 - 2021/02/01	213.1 - 418.4	205.3	2.82	R 578.68				
							R 683.76	R 7 979.12	R 1 196.87	R 9 175.99
Customer 1 (PTY) LTD										
	BV-002 Unit 5	2021/01/01 - 2021/02/01	959.4 - 1603.2	643.8	2.82	R 1 814.68				
							R 133.20	R 1 947.88	R 292.18	R 2 240.06

- **System Integrity**, Various checks and comparison are automatically performed on the readings and anomalies are highlighted for our well qualified staff to investigate and rectify.

Monthly Comparisons

Meter Name	Description	2020/12/01	2021/01/01	Average	Variance	% Change
BV-001	DBE Lobby	141	136	138	4	-3
BV-002	Unit 5	959	644	802	24901	-33

- **Instantaneous Billing,** Invoices are processed immediately reducing the cash cycle whilst, further increasing utility profitability.
- **Data Integrity,** The system is designed to read all status and billing registers directly from the devices. Consequently, data and (therefore) revenues are guaranteed. This because; even if the communication medium has been compromised, once reinstated the system will have access to the billing or status data which is stored in non-volatile memory inside the energy billing devices.

Note

The cloud based system provides the administrator of utilities with quality information, while the responsibility of getting the correct information lies with Advanced Monitoring Solutions. With more than 20 years of experience AMSO is well equipped to manage your metering system with integrity and reliability.