

Digital Energy Meters

**metator**

a solution for intelligent metering



# metator

Metator™ is a complete end-to-end Remote Automated Electronic Meter Reading Solution (AMR) from BBS Access. Metator™ is an excellent solution for restrictive and inaccessible residential, commercial and industrial sites using a built-in or attached Radio Frequency (RF) receiver / transceiver Hand Held Unit (HHU), which can collect meter readings from our AMR-ready energy meter on the fly! Enabling “Walk-by” meter reading, thereafter, the data is swiftly transmitted to the data warehousing operations centre for rapid and real-time processing of collected data to ensure quick and accurate billing to utility consumers.

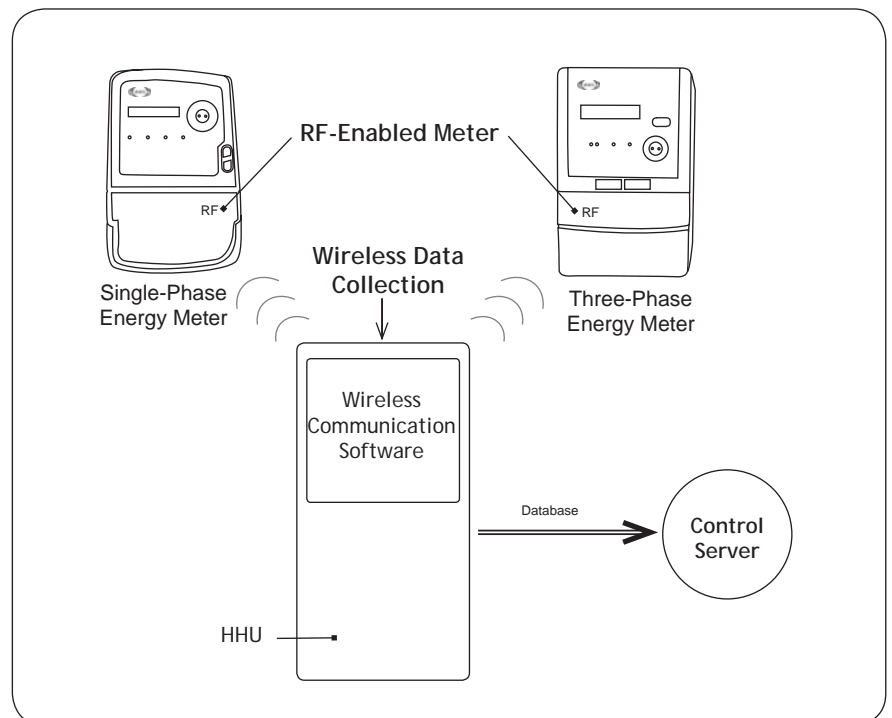
## FEATURES & BENEFITS

The BBS Access AMR solution provides the following benefits to utility companies:

- High quality and tamper-resistant Single-Phase and Three-Phase meters with RF (wireless) capability.
- “Two-way” smart RF technology enabling remote “Walk-by” meter reading and, faulty & tampered meter identification.
- Centralized data collection and recording enabling easy access and analysis of data.
- Web-based application software with graphical and tabular reporting.
- Modular and flexible architecture.

## SYSTEM OVERVIEW

The Metator™ consists of the following hardware devices:



**RF-Enabled Meter-** A range of multifunction and tamper-resistant energy meters to measure the delivery of electrical power and other related parameters. Meters are available with built-in RF communications or can be outfitted with an external RF communication module.

**Wireless Data Collection-** Armed with Pocket PC or a Laptop computer and fitted with a compatible wireless modem and wireless communication software, the meter reader walks or drives at various collection points to collect data from meters around these points.

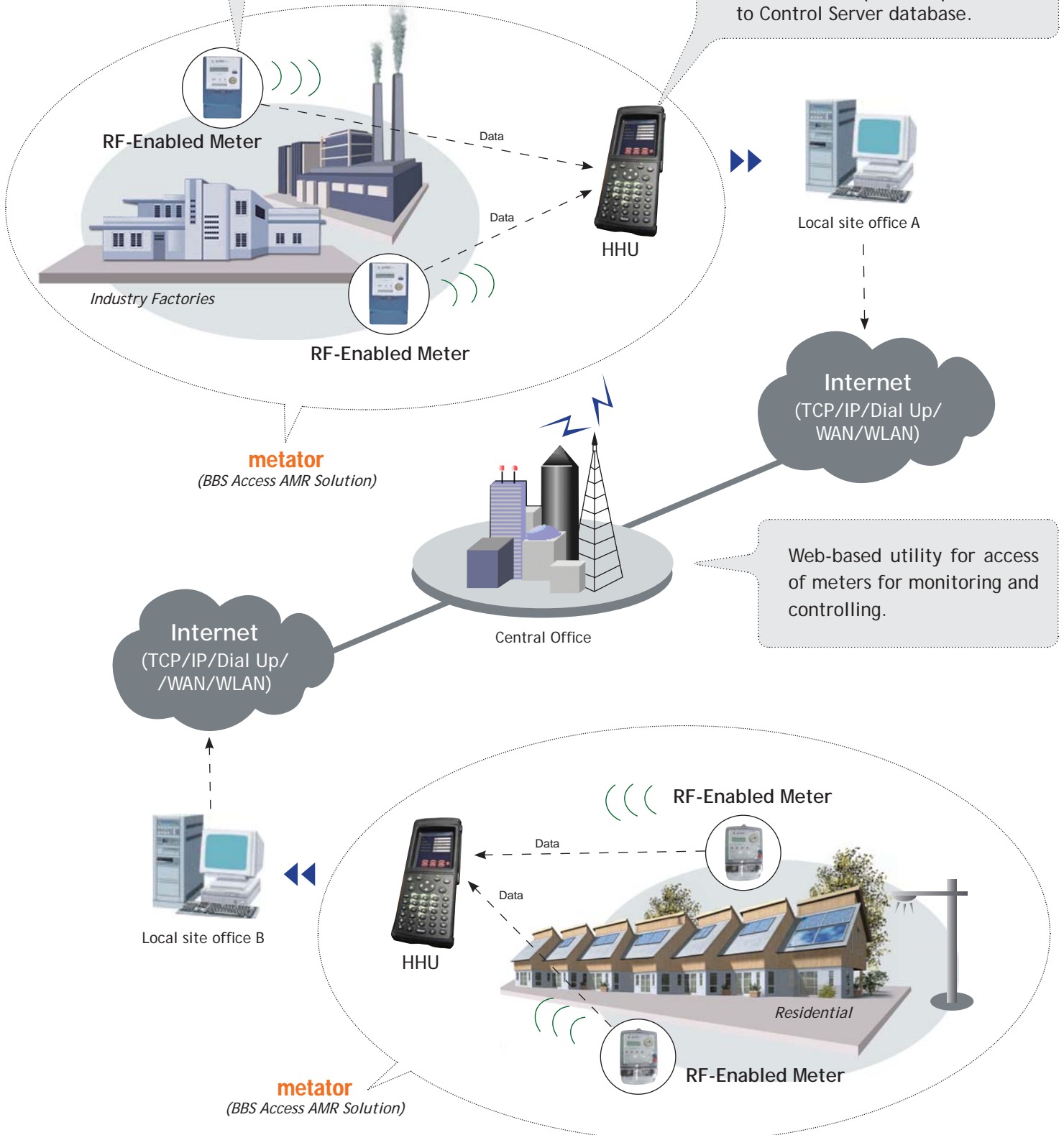
# SYSTEM ARCHITECTURE

## Wireless (RF) Enabled Meters

- Reliable omni-communications with error detection.
- ACK and Retry between smart meter reader and HHU.
- RF working range 433/868/900 MHZ license free bands.
- Integrated Master and repeater functions.
- Hopping and relaying algorithm for extended communication range.

## Hand Held Unit (HHU)

- Rugged Shock and weather proof Hand Held Unit.
- Ideal for Walk-by & Drive-by low-cost meter data collection.
- Collects all the data available inside the meter.
- Built-in WLAN port to upload data to Control Server database.



# FINANCIAL & BUSINESS ADVANTAGES

✓ Reduces data collection and billing costs.

✓ Eliminates meter tampering and reduces overall revenue loss.

✓ Enables near real-time and remote meter reading and control.

✓ Provides visibility towards Transmission & Distribution (T&C) losses and enables Demand Side Management (DSM).

✓ Profiling of consumer energy consumption patterns to plan optimization of utility power generation and distribution.

✓ Modular upgrade of non-AMR meters to Smart AMR meters lowers initial investment and enables upgrading at marginal cost.

✓ User-friendly application increases operational efficiency and customer satisfaction.

✓ Above all, the BBS Metator™ AMR Solution provides a fast return-on-investment with lower cost of ownership.

BBS Access began with its indigenous design of energy meters by leveraging on the success of its sister company's electronics division of supplying electrical components for worldwide manufacturers of Single-Phase and Three-Phase energy meters. Since then, we have accumulated extensive experience in migrating traditional electromechanical energy meters to our Metator™ Solo and Tango range of versatile digital meters.

We have a proven track record in undertaking high volume contracts in supplying the Metator™ range of meters to power utility companies. Our successful reference installation sites are in cities and industrial plants across various countries in Asia and Africa. We have demonstrated our engineering capability in fulfilling and exceeding our customers' requirements and have built mutually successful relationships through technology collaboration and strategic alliances with our partners and customers in the power utility industries across the world.

With the advent of Automated Meter Reading (AMR), BBS Access has quickly established itself as the market-leader in supplying its customers with the latest cost-effective solutions in RF-based Walk-by & Drive-by AMR technology, as well as fully-automated end-to-end PLC-based AMR solutions. Metator™ for Walk-by & Drive-by AMR applications includes Single-Phase and Three-Phase meters, equipped with RF Modems as well as RF Hand Held Units (HHU) for remote management and control of the meters.

As a result of our achievement in the quantum growth of the Digital Energy Meter & AMR world market, BBS Access is now emerging as a leading market player and solutions- provider of our state-of-the art wireless Metator™ AMR solution to the power and infrastructure sector industries in Asia and Africa and with a strategic advance in the worldwide power utility markets.

## **B.B.S. @ccess**

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