



# Smart Steps to Smart Grid

## POWERCOM PREPAYMENT SOLUTION

Powercom prepayment system is a state of the art solution enabling its customers to enjoy the benefits of a most advanced Meter Management (AMM) offering. Powercom is one of the few world companies changing the prepayment world and turning it from a "meter solution" into the world most advanced "full smart grid solution".

Powercom would like to offer Prepayment users to consider implementing "Smart Grid Solution" which will dramatically reduce the "total cost of ownership". Powercom would like to offer not just meters, but rather present an end to end solution with the benefits of staying within the budget requirements.

### **System advantages:**

#### **The process and the meters:**

1. The money is downloaded automatically into the meter. There is no need for the customer to push any keys or enter any code to the meter.
2. Simplifying the prepayment process - No need for expensive vending machines (each costs around 120K USD). The customers can pay the bills through the phone, at a bank, simple ATM machines, post office etc. No need for STS coding and the need for daily maintenance. Saving costs.
3. Smart and simple payment notification and certification. Customer gets the alert to pay automatically from the system (upon personal setting to each one) by SMS, E-mail or via mail.
4. Flexibility – Each meter can be changed from prepayment to credit from the control center. No need to replace the meters.
5. Remote connect/disconnect for the center. No need to send special people to disconnect non paying customers. Avoid the conflict with the customers.
6. Smart disconnection/Load limitation – In case the customer did not pay on time, the system allows the customer to consume small amount of energy (only for lights and refrigerator) before full disconnection. It improves the relationship between the Electricity provider and the users.
7. The system provides end to end protection against meter tampering, grid tampering, in organization tampering.
8. Real time notification - The tampering alerts are automatically generated by the control center in real time. It allows the operator to catch the tampering while it takes place.
9. The Meter – A fully protected meter against tampering with operator notification. Cover open indication.
10. No need to place the meter in protected environment.
11. No need for external keyboards and extra equipment – additional point of failure
12. Constant communication with each meter at all times, meaning change in tariffs can be downloaded into the meter from the control center.
13. Automatic system alerting, billing, customer service messages.
14. The system offers open architecture, allowing the utility use other meter manufacturers (as long as they use M-Bus protocol). In this way the flexibility of the system suppliers is maintained.





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15. System expansion upon needs. Possible adding of smart home applications, load control system, Forecasting models, statistics etc.
16. Easy setup – Remote firmware upgrade
17. Using the existing power line infrastructure- Hi speed long distance communication. No infrastructure costs. Signal can be repeated up to 6km of wires
18. Load control abilities - In case of supply problems the customers can be limited with their power consumption.
19. Load forecasting – Using inputs as weather forecast (temp., humidity, wind speed/ direction) and history information, the utility can plan in advance its hourly energy production needs. This saves unnecessary power to be wasted (electricity production saving) or plan for catastrophe.
20. Energy saving and energy conservation – Offering customers to save on Electricity by introduction of their real time consumption by 7" LCD display. Saving of 20% and more can be achieved using these smart elements.
21. In house load control – The utility has the ability to control large power consumers within the house as air condition, hot water, swimming pool heating. Changing Demand Response.
22. Load profiling for each customer, street, neighborhood, and city. Region and country. Can forecast necessary grid changes and issues work plans for the next year to come (smart planning).
23. The utility protects its Circuit breaker in each house through smart setting by the meter.
24. End to end solution tailored to each customer according to his needs. Includes Hardware and Software.
25. Possible to control street light on the same system.
26. Offering value added services as Water, Gas, Sensors readings and control. Generates extra income for the utility company.
27. Meters can be installed in Commercial, Industrial and Residential locations.
28. Open protocol – able to use 3rd. party meters and solutions
29. Plug and play installation setup.
30. Customer Asset Management
31. All users consumption profiles are stored and can be analyzed for farther needs
32. Long life time cycle solution. Covers the needs for the next 15-20 years.
33. Export and Import any type of data to/from other systems.

### One Stop Shop

Powercom will be more than happy to demonstrate to system capability as soon as the customer requests.

Warm regards,  
Yackov Dar - CEO



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