

68. Title: Data-smart Power Meters

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Keywords: Data learning enabled IoT, Smart data pruning

Domain: Smart Technologies

Summary: The current technology exploits redundancy of data from the basic IoT devices to prune the content significantly. The information content in the data is within user-defined tolerable error limits. Works on single time series as well as on multivariate data

- » Exploits temporal and cross-parameter data redundancies for pruning the basic meter generated data, to save significant communication bandwidth and cloud storage space
- » Data-driven smart pruning makes the technology advanced compared to the state of the art
- » Can enable data collection in the intervals of 5 to 15 minutes (can be tuned further) without loading the communication network
- » Enables the gateway node (access point) to connect significantly larger number of IoT nodes compared to the state of the art
- » DLMS compliant

Advantages: Significant bandwidth and cloud storage saving

Applications: Smart power meters

Technology Readiness Level: 4

IP Status: Indian Patent Application 201811030697, Indian Patent Application 201811041561, US Patent Application 17/290,937, US Patent Application 17/306,383