An Energy Management Framework for Smart Factory based on Context-awareness

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Abstract—In this paper, an energy management framework for smart factory is illustrated based on context-awareness. The smart factory is composed of the three layers, and IoT sensors are deployed in the smart factories and used to collect many kinds of data including personnel, equipment, and environment. The first layer, the data collection and control layer, collects and sends environmental and control data to the second layer. And, the second layer, energy management based on context-awareness layer, analyses the data and infers the context from them. Finally, the energy service layer provides energy management services to users through monitoring and controlling the status of energy consumption. Using the proposed scheme, users can monitor their energy consumption, and control their utilities and equipment to avoid energy leakage

Keyword—Smart Factory, Energy Saving, Framework, IoT, Context-aware



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