

IOT for Power Equipment Condition Monitoring and Diagnosis

The ubiquitous power internet of things (UPIoT) is an important technology and content for the upgrading of power equipment condition monitoring and diagnosis (CMD). This presentation focuses on the state-of-art of the key technologies of IoT for the improving of power equipment from the intelligent sensor, edge computing, big data analysis and artificial intelligence technology point of views. Then the application framework and scenarios including power substation and distribution of IoT for power equipment are also introduced respectively. Then the development trends of UPIoT for power equipment CMD are discussed. The full perception of power equipment state through distributed intelligent sensor network will be widely used in the future power grid. On the other hand, more and more special and customized chips for CMD will be developed rapidly. Furthermore, the incoming blockchain also brings potential application together with IoT for power equipment CMD.