IS 16444 (Part 2): 2017

a.c. Static Transformer Operated Watthour and VAR-Hour SmartMeters, Class 0.2S, 0.5S and 1.0S Part 2 Specification Transformer Operated Smart Meters

IS 16444 (Part 2): 2017 specifies requirements for transformer-operated smart meters used in measuring active and reactive electrical energy, focusing on accuracy classes 0.2S, 0.5S, and 1.0S. It outlines the design of smart meters, which integrate metrology, data communication, and control elements.

The standard supports Advanced Metering Infrastructure (AMI) and highlights the smart meter's role in two-way communication between utilities and consumers, enabling efficient data exchange and remote management. Connectivity options include NAN (Neighbourhood Area Network) and WAN (Wide Area Network) modules, along with in-home displays.

The smart meters must meet electrical, mechanical, and environmental requirements per IS 14697 and provide data protocols as per IS 15959 series of standards. Testing includes metrology, communication, and data exchange protocols to ensure reliability and compatibility. This standard aims to enhance energy management by supporting government initiatives for smart grid deployments in India.