

Hardware Standard Update

ANSI C12.10

Conforming Meters

- Wholesale Revenue Metering Standard details conforming meter requirements
- Section 5.1 & 5.2 - accuracy requirements for Main and Alternate meters
 - ANSI C12.20 0.2% and 0.5%
- Section 5.4 - functional requirements for Main and Alternate meters

Physical Characteristics

- Physical construction of meter is not defined in the Hardware Standard
- ANSI C12.10 - 1997 American National Standard for Watthour Meters
 - Assigns meter form designations (form factors)
 - Specifies meter outline and terminal dimensions
 - Applies to Type “S” socket (detachable) meters and Type “A” base (bottom-connected) meters

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Defines Packaging Standard

- Round meter housing with rear blades designed to mount into a socket base
- Specifies internal and external electrical connections made to each meter blade
- Different terminal connections for single-phase, two element, three-element, self-contained and transformer-rated meters

Standardization Benefits

- Many metering devices meet accuracy requirements but not physical construction
 - non-standard meter form - switchboard, transducer or panel type meters
 - no sealing provisions
 - no optical port (RS232 to optical converter)
 - remote displays are optional
- Designed for different applications and adapted for revenue metering

Standardization Benefits

- Interchangeability of manufacturers' revenue meters
- Interchangeability of manufacturers' meter mounting devices
- One security seal for meter and mounting device
- Meter terminals made inaccessible after meter sealed in place