

1. Scope

This material standard covers the requirements for furnishing and delivering electronic single phase, Class 200, 30 test amperes, 240 volt, 60 Hz, Form 2S and 12S, self-contained watthour meter(s). Any changes or exceptions listed in the Special Provisions Sheet shall take precedence over this material standard.

3. Reference Standards

All characteristics, definitions, terminology, voltage designations and tests, except as otherwise specified herein, shall be in accordance with the following industry standards for distribution, power and regulating transformers. When the following standards are superseded by an approved revision, the revision shall apply.

Industry Standards

ANSI C12.1-2008 American National Standard, Code for Electricity Metering

ANSI C2.10-2011 American National Standard, Physical Aspects of Watthour Meters — Safety Standard

ANSI C12.18-2006 American National Standard, Protocol Specification for ANSI Type 2 Optical Port

ANSI C57.12.19-2008 American National Standard, For Utility Industry End Device Data Tables

ANSI C57.12.20-2010 American National Standard for Electricity Meters — 0.2 and 0.5 Accuracy Classes

4. Construction

4.1 Type Designation and Identification

Each meter shall be designated by type and given a serial number by the MANUFACTURER. The serial number type designation and the District's meter number (District meter number sequence to be supplied by the District) shall be legibly marked on the nameplate of each meter in numbers at least 1/4 inch high. Meter nameplate to have "Snohomish PUD No. 1" imprinted above or to the left of the meter number.

4.2 Registers

Each watthour meter shall be provided with a five digit to the left of the decimal, 0 to the right solid state LCD type display. The display digits for visual reading of measured quantities shall be no less than 0.375 inches high.

4.3 Cover

The cover shall be constructed of UV resistant polycarbonate plastic and shall be dust-proof and raintight for outdoor installations. The cover shall be easily removed after the removal of the T-type seal. Covers that are attached by screws, bolts, or other permanent type devices are not acceptable.

4.4 Sealing

The cover shall be sealed to the watthour meter base by means of a T-type seal. These seals shall be located and installed so as to prevent unauthorized tampering with the meters' internal components.

4.5 Provision for Adjustment

N/A

5. Refurbished Meters

5.1 General Requirements

Refurbished meters shall meet all applicable requirements of this material standard. Refurbished meters shall be 10 years old or newer from the original manufacturer's production date.

5.2 Meter Type

Meter type shall be a District approved manufacturer's part number.

5.3 Nameplates

Nameplate designs must be approved by the District. New nameplates with District assigned numbering and District name, "Snohomish County PUD no. 1", shall be required. Refer to Section 4.1 for specific details.

5.4 Meter Programming

Meters shall have a default programming password to allow for programming by the District.

5.5 Meter Covers

Meter covers shall be in new or near new condition as determined by the District.

5.6 Batteries

Meters requiring a battery must use a type 1/2 AA, 3.6 volt and must be able to be easily replaced and not soldered into the circuit board. The District will provide batteries for the meters.

5.7 Warranty

All refurbished meters shall include a full 2 year warranty provided by the vendor.

6. Performance Requirements

All meters shall be certified by the manufacturer to perform as stated in ANSI C12.20-1998 for 0.2% accuracy class meters.

6.1 Certified Test Reports

Certified test results for full load, light load, and power factor percent accuracy are to be provided to the District at no additional cost.

6.2 Compatibility

Meters with load profile memory shall comply with ANSI C12.18 and be MV-90, MVRS and MVLТ compatible.

7. Meter Data

Data for each meter shall be submitted at the time of shipment. Data files shall be submitted via e-mail to:

dshines@snopud.com

7.1 Data Format

Meter data shall be formatted as an ASCII file with variable length records, comma delimited. Fields shall be stripped of leading and trailing blanks. The data set shall include the following:

Field	Field Name	Data Type	Sample Data
1	Manufacturer Serial No.	Char(10)	52961854
2	PUD Meter Number	Char(10)	349307
3	Manufacturer	Char(4)	G.E.
4	Type	Char(7)	I70S
5	Test Current	Int(3)	30
6	Test Date	Char(10)	05-12-2015 ("dd-mm-yyyy")
7	Voltage	Int(3)	240
8	No. Wires	Int(1)	3
9	Phase	Int(1)	1
10	No. Elements	Int(1)	1
11	Watt-hour Constant	Numeric(7,1)	1.0
12	PO Number	Int(10)	4500007852
13	PO Revision	Int(3)	001
14	PO Release	Int(3)	001
15	PO Line	Int(3)	001
16	Purchase Date	Char(10)	05-12-2015 ("dd-mm-yyyy")
17	Unit Cost	Numeric(6,2)	S
18	F.L. Test %Acc.	Numeric(6,2)	100.00
19	P.F Test %Acc.	Numeric(6,2)	99.01
20	L.L. Test %Acc.	Numeric(6,2)	100.02

8. Packaging

Meters shall be sequentially numbered and packed, specially palletized by District Material ID number, with a completed meter data summary form and a tabulated list of District meter numbers and manufacturer serial numbers attached.

9. Evaluation of Bids

The following factors will be considered in the analysis and evaluation of bids and subsequent bid award:

1. Price
2. Delivery Schedule
3. Past Performance of BIDDER and Product
4. Adherence to STANDARD
5. Conditions of Warranty