

भारतीय मानक ब्यूरो
(केंद्रीय मुहर विभाग III)

हमारा संदर्भ : सी एम डी - III/16 : 16444(Part 1)

29 May 2019

विषय : आई एस 16444 (Part 1):2015 के लिए समूहीकरण दिशानिर्देश

इसे उपरोक्त विषय का संदर्भ है।

सक्षम प्राधिकारी ने उपरोक्त, अनुपालन हेतु दिशानिर्देश को अनुमोदित कर दिया है।

सभी संबंधित पक्षकारों से अनुरोध है कि आई एस 16444 (Part 1):2015 के लिए संलग्न समूहीकरण दिशानिर्देश की अनुपालन तत्काल प्रभाव से सुनिश्चित करें।

(अलिस्मिता खाग)
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प्रमुख (सी एम डी-III)

सभी क्षेत्रीय /शाखा कार्यालय

प्रतिलिपि : आई टी एस विभाग - बी आई एस इंटरनेट पर डालने हेतु।

**BUREAU OF INDIAN STANDARDS
(Central Marks Department-III)**

Our Ref: CMD-III/16: IS 16444(Part 1)

29 May 2019

Subject: Guidelines for Certification of ac static direct connected watt-hour smart meters, class 1 and 2 as per IS 16444(Part 1):2015

This has reference to the subject stated above.

The guidelines for drawal of samples for GoL/CSoL for IS 16444(Part 1):2015 have been approved by the Competent Authority.

All concerned are requested to ensure compliance of the above guidelines with immediate effect.

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Head(CMD-III)

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BUREAU OF INDIAN STANDARDS
(Central Marks Department-III)

Our Ref: CMD-III/16:16444

29 May 2019

Subject: Guidelines for Certification of ac static direct connected watt-hour smart meters, class 1 and 2 as per IS 16444(Part 1):2015

1. The guidelines given below shall be followed with immediate effect for considering GOL/ CSoL of ac static direct connected watt-hour smart meters, class 1 and 2 as per IS 16444(Part 1):2015:

(a). Samples of each variety of meters shall be tested considering the following:

- i. Accuracy Class – 1, 2
- ii. Category – Single Phase, Three Phase
- iii. Type of display- Electro-mechanical register, Electronic display
- iv. Communication Module – NAN, WAN
- v. Load Switching Utilization Category – UC1, UC2, UC3

(b). The following relaxation may be given when a variety is tested for all the requirements:

- i. Same basic current (I_b) and different current ratio (I_{max}/I_b) – One sample of maximum current ratio (I_{max}/I_b) out of the range offered be subjected to all tests.
- ii. Different basic current (I_b) but same (I_{max}/I_b) – One sample with highest (I_b) be subjected to all tests.
- iii. Different basic current (I_b) and different (I_{max}/I_b) – One sample with lowest (I_b) and lowest (I_{max}/I_b) and another sample with highest (I_b) and highest (I_{max}/I_b) be subjected to all tests.
- iv. For inclusion – If same (I_b) with different (I_{max}/I_b) is to be included in the licence, the varieties offered be subjected to tests applicable at I_{max} only.

(c). If the licence covers only ‘Electro mechanical register’ and inclusion of ‘Electronic display’ is to be considered, samples of Smart Meter with ‘Electronic display’ from any one Variety already covered in the license or any new variety intended to be covered in the license be subjected to all tests or vice-versa.

(d). In case of electronic display, manufacturer’s certificate shall be obtained for compliance to the requirement of Clause 6.6 of IS 16444(Part 1):2015.

2. With respect to a given module of communication (WAN/NAN), the following tests needs to be done while processing GoL/CSoL:
 - Power Consumption as per Cl. 6.10.1 of IS 16444 (Part 1):2015
 - Test of Immunity to electromagnetic HF Fields as per Cl. 5.5.3 of IS 15884:2010
 - Test of Immunity to Electrostatic Discharges as per Cl. 5.5.2 of IS 15884:2010
 - Test of Radio Interference measurement as per Cl. 5.5.5 of IS 15884:2010
 - Test of Limits of Error due to variation of the current as per Cl. 11.1 of IS 13779:1999
 - Tests listed in Note 1 (b) & 1 (c) of Table 1 of IS 16444 (Part 1):2015
 - RF Technology requirements as per Cl. 9.2 of IS 16444 (Part 1):2015
3. The Firm shall declare the varieties of ac static direct connected watthour smart meters they intend to cover in the Licence. One set of drawings representing each of these varieties be sealed and kept in the factory for reference whenever required. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
4. During the operation of the Licence, BO shall ensure that all the Varieties covered in the Licence are tested in rotation to the extent possible.
5. The Scope of Licence may be given in the following manner:

“Ac Static Direct connected Watthour smart meters, Class 1/ 2, Single phase / Three phase, Type, Voltage.....V, Basic current (I_b), Maximum current (I_{max}), Frequency, Communication Module WAN / NAN, Electro-mechanical register/ Electronic display, Load Switching Utilization Category UC1 / UC2 / UC3 as per IS 16444(Part 1):2015”

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