## Schedule

Issue date: 03 September 2025

Valid Until: -



**NO: SAMM 376** 

(Issue 2, 03 September 2025 replacement of SAMM 376 dated 26 March 2025)

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| LABORATORY LOCATION/                    | Smart Meters Technologies (M) Sdn Bhd                        |
|---|--|
| CENTRAL OFFICE:                         | No 2, Jalan Angklung, 33/20 Technology Park 40400 Shah Alam, |
|   | Selangor, 40400,   |
|   | SELANGOR   |
|   | MALAYSIA   |
| (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) |  |
| ACCREDITED SINCE :                      | 03 SEPTEMBER 2025  |
| FIELD(S) OF TESTING:                    | ELECTRICAL   |

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

| CENTRAL LOCATION:    | Smart Meters Technologies (M) Sdn Bhd<br>No 2, Jalan Angklung, 33/20 Technology Park 40400 Shah Alam,<br>Selangor , 40400,<br>Selangor |
|----------------------|--|
| FIELD(S) OF TESTING: | ELECTRICAL,  |

**SCOPE OF TESTING: ELECTRICAL** 

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| Material / Product Tested  | Type Of Test / Properties<br>Measured / Range Of<br>Measurement | Standard Test Methods / Equipment / Techniques   |
|--|---|--|
| Conventional Electronic Energy Meter 1.single Phase Static Energy          |   | Tests and measurements at:<br>Input voltage : 110 V to 276 V<br>Input current : 0.015 A to 100 A |
| Meters Active Energy (class 1.0 & 2.0)                                     | Limits of Error due to Variation                                | Frequency : 50 Hz  |
| Active Energy (class 1.0 & 2.0)  | of Current  | IEC 62053-21:2020 Clause 7.9   |
|  | 2. Test of No Load Condition (Creeping test)                    | IEC 62053-21:2020 Clause 7.6   |
|  | 3. Starting Test  | IEC 62053-21:2020 Clause 7.7   |
|  | 4. Dial/ Register Test (Meter constant)                         | IEC 62053-21:2020 Clause 7.4   |
|  | 5. Output Pulse test  | IEC 62053-21:2020 Clause 7.4   |
| Meter  2. Three Phase Static Energy  |   | Test and measurements at:<br>Input voltage :<br>63.5 V to 276 V per phase                        |
| Meter (current Transformer<br>Operated Meters And Whole<br>Current Meters) |   | Input current :<br>0.001 A to 100 A per phase<br>Frequency : 50 Hz                               |
| a) Active Energy (class 1.0 And 2.0) (class 0.5s And 0.2s)                 | Limits of Error due to Variation of Current                     | IEC 62053-21:2020 Clause 7.9<br>IEC 62053-22:2020 Clause 7.9                                     |
|  | Test of No Load Condition     (Creeping test)                   | IEC 62053-21:2020 Clause 7.6<br>IEC 62053-22:2020 Clause 7.6                                     |
|  | 3. Starting Test  | IEC 62053-21:2020 Clause 7.7<br>IEC 62053-22:2020 Clause7.7                                      |
|  | 4. Dial/ Register Test (Meter constant)                         | IEC 62053-21:2020 Clause 7.4<br>IEC 62053-22:2020 Clause 7.4                                     |
|  | 5. Output Pulse test  | IEC 62053-21:2020 Clause 7.4<br>IEC 62053-22:2020 Clause 7.4                                     |
|  | 6. Maximum Demand   | IEC 62053-21:2020 Clause 7.4<br>IEC 62053-22:2020 Clause 7.4                                     |
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|------------------------------------|---|--|
| Material / Product Tested          | Type Of Test / Properties Measured / Range Of       | Standard Test Methods / Equipment / Techniques             |
|                                    | Measurement   | _qa.p.nont/ toominquoo                                     |
| Conventional Electronic Energy     | Measurement   | Test and measurements at:                                  |
| Meter                              |   | Input voltage :  |
| 2. Three Phase Static Energy       |   | 110 V to 276 V per phase                                   |
| Meter (current Transformer         |   | Input current :  |
| Operated And Whole Current         |   | 0.015 A to 100 A per phase                                 |
| Meters)                            |   | Frequency: 50 Hz   |
| A) Reactive Energy (class 2.0      | 1. Limits of Error due to Variation                 | requeriey : 30 mz  |
| And 3.0)                           | of Current  | IEC 62053-23:2020 Clause 7.9                               |
| And 5.0)                           | of Guiterit   | 120 02003-25.2020 Clause 7.9                               |
|                                    | 2. Test of No Load Condition                        | IEC 62053-23:2020 Clause 7.6                               |
|                                    | (Creeping test)                                     |  |
|                                    | 3. Starting Test                                    | IEC 62053-23:2020 Clause 7.7                               |
|                                    |   |  |
|                                    | 4. Dial/ Register Test                              | IEC 62053-23:2020 Clause 7.4                               |
|                                    | (Meter constant)                                    |  |
|                                    | 5. Output Pulse test                                | IEC 62053-23:2020 Clause 7.4                               |
|                                    |   |  |
|                                    | 6. Maximum Demand                                   | IEC 62053-23:2020 Clause 7.4                               |
| Hybrid Meter/ Smart Meter          |   | Test and measurements at:                                  |
| 1. Single Phase Static Energy      |   | Input voltage :  |
| Meters                             |   | 110 V to 276 V per phase                                   |
| A) Active Energy (class 1.0 & 2.0) |   | Input current :  |
|                                    |   | 0.015 A to 100 A per phase                                 |
|                                    |   | Frequency : 50 Hz  |
|                                    | 1. Limits of Error due to Variation                 |  |
|                                    | of Current  | IEC62053-21:2020 Clause 7.9                                |
|                                    |   |  |
|                                    | 2. Test of No Load Condition                        | IEC62053-21:2020 Clause 7.6                                |
|                                    | (Creeping Test)                                     | 15000050 04 0000 01 7.7                                    |
|                                    | 3. Starting Test                                    | IEC62053-21:2020 Clause 7.7                                |
|                                    | 4 Dial/ Degister Test                               | IECC2052 24:2020 Clause 7.4                                |
|                                    | 4. Dial/ Register Test                              | IEC62053-21:2020 Clause 7.4                                |
|                                    | (Meter Constant)                                    | IFC62052 24:2020 Clause 7.4                                |
| Hybrid Meter/ Smart Meter          | Maximum Demand     Limits of Error due to Variation | IEC62053-21:2020 Clause 7.4<br>IEC62053-23:2020 Clause 7.9 |
| Single Phase Static Energy         | of Current  | 1L002003-23.2020 Clause 7.9                                |
| Meters                             | or Junetit  | IEC62053-23:2020 Clause 7.6                                |
| B) Reactive Energy (class 2.0 &    | 2. Test of No Load Condition                        | 12002000-20.2020 Olduse 1.0                                |
| 3.0)                               | (Creeping Test)                                     | IEC62053-23:2020 Clause 7.7                                |
| 0.0,                               | 3. Starting Test                                    | 1202000 20.2020 010000 7.7                                 |
|                                    |   | IEC62053-23:2020 Clause 7.4                                |
|                                    | 4. Dial/ Register Test                              |  |
|                                    | (Meter Constant)                                    | IEC62053-23:2020 Clause 7.4                                |
|                                    | 5. Maximum Demand                                   |  |
|                                    |   |  |
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|---|---|---|
| Hybrid Meter/ Smart Meter 2. Three Phase Static Energy Meter (current Transformer Operated And Whole Current Meters)                                      | Limits of Error due to Variation                                | Test and measurement at:<br>Input voltage: 63.5 V to 276 V per<br>phase<br>Input current: 0.001 A to 100 A per<br>phase |
| A) Active Energy (class 1.0 & 2.0) (class 0.5s & 0.2s)  | of Current  | Frequency: 50 Hz IEC62053-21:2020 Clause 7.9  |
|   | 2. Test of No Load Condition (Creeping Test)                    | IEC62053-22:2020 Clause 7.9 IEC62053-21:2020 Clause 7.6   |
|   | 3. Starting Test  | IEC62053-21:2020 Clause 7.6   |
|   | 4. Dial/ Register Test (Meter Constant)                         | IEC62053-21:2020 Clause 7.7<br>IEC62053-22:2020 Clause 7.7  |
|   | 5. Maximum Demand   | IEC62053-21:2020 Clause 7.4<br>IEC62053-22:2020 Clause 7.4  |
|   |   | IEC62053-21:2020 Clause 7.4<br>IEC62053-22:2020 Clause 7.4  |
| Hybrid Meter/ Smart Meter 2. Three Phase Static Energy Meter (current Transformer Operated And Whole Current Meters) B) Reactive Energy (class 2.0 & 3.0) | Limits of Error due to Variation of Current                     | IEC62053-23:2020 Clause 7.9   |
|   | 2. Test of No Load Condition                                    | IEC62053-23:2020 Clause 7.6   |
|   | (Creeping Test) 3. Starting Test                                | IEC62053-23:2020 Clause 7.7 IEC62053-23:2020 Clause 7.4   |
|   | 4. Dial/ Register Test  | IEC62053-23:2020 Clause 7.4   |
|   | (Meter Constant) 5. Maximum Demand                              | 1EC02033-23.2020 Clause 7.4   |