

Australian Government

Department of Industry, Science and Resources



36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 14/2/83

Issued by the Chief Metrologist under Regulation 60 of the National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Secure Model Sprint 210 Class 1 Electricity Meter

submitted by Secure Meters (Australia) Pty Ltd 39 – 41, Fennell Street Port Melbourne VIC 3207

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI M 6-1 *Electricity Meters. Part 1: Metrological and Technical Requirements*, July 2012.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

Rev	Reason/Details	Date
0	Pattern approved – interim certificate issued	22/05/15
1	Pattern approved – certificate issued	15/10/15
2	Variant 1 approved – certificate issued	9/01/17
3	Variant 2 approved – certificate issued	20/09/17
4	Pattern amended (addition of bi-directional measurement and harmonics)	29/07/22
	Variant 3 approved (Pathway 2) – certificate issued	
5	Variants 4, 5 & 6 approved, formatting amended throughout	25/06/25
	certificate – certificate issued	

DOCUMENT HISTORY

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 14/2/83' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

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Casey Gazzard Acting Manager Policy and Regulatory Services

TECHNICAL SCHEDULE No 14/2/83

1. Description of Pattern

approved on 22/05/15

A Secure model Sprint 210 class 1 electronic polyphase direct connect static watt hour meter (Figure 1) used to measure electrical energy.

Field of Operation 1.1

The field of operation of the measuring system is determined by the following characteristics:

•	Number of phases		3		
•	Number of wires	4			
•	Reference frequer	50 Hz			
•	Reference ambient temperature ranges:				
	specified range of operation		−10 to 60 °C		
	limit range of operation		−20 to 70 °C		
•	Rated voltage		3×230 (400) V AC		
•	Rated currents:	Basic current, I _b	10 A		
		Maximum current, I _{max}	100 A		
•	Meter constant		1 Wh/imp		
•	Accuracy class		1		

Accuracy class

1.2 **Features/Functions**

- Three (3) elements
- Electronic (LCD) digital indicator
- Measurement in both positive and negative directions (export and import)
- Optional integrated 100 A mains supply contactor
- Optional integrated load control relays (2 A, 31.5 A or 60 A)
- Field replaceable AMI communication module
- Bottom connect type base
- Internal synchronous and crystal clocks •

1.3 Verification Provision

Provision is made for the application of a verification mark.

1.4 Descriptive Markings

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's name or mark	
Model designation	
Serial number	
Pattern approval mark	NMI 14/2/83
Number of phases	
Number or wires	
Reference frequency	Hz
Meter constant	
Rated voltage	AC
Rated currents:	<i>I</i> _b А
	I _{max} A
Accuracy index	Class

1.5 Sealing Provision

Provision is made for the instrument to be sealed by the application of one or more mechanical seals (Figure 2).

1.6 Harmonics

Instruments purporting to comply with this approval (the pattern and the variants 1 & 2) are suitable for use where the harmonics do not exceed those specified in NMI M 6-1:2012.

2. Description of Variant 1

A Secure model Sprint 211 polyphase direct connect static watt hour meter (Figure 3) used to measure electrical energy. This variant has the same Field of Operation and Features as the pattern except that it features an optional fitted cellular communication module.

3. Description of Variant 2

A Secure model Sprint 231 polyphase direct connect static watt hour meter (Figure 4) used to measure electrical energy. This variant has the same Field of Operation and Features as the pattern except that it features an optional fitted cellular communication module (Skyline – i533/033).

Note: This meter is also approved to measure single phase loads.

4. Description of Variant 3

A Secure model Sprint 210 polyphase direct connect static watt hour meter used to measure electrical energy. This variant has the same Field of Operation and Features as the pattern except the following:

• Rated voltage

Note 1: Approval for Variant 3 has been granted with reference to NMI M 13-1 *Active-energy electricity meters*, June 2022, which was also specified as Pathway 2 in the NMI M 6-1 *Active-Energy Electricity Meters*. *Part 1: Metrological and Technical Requirements*, July 2020.

Note 2: Instruments purporting to comply with this approval as variant 3, are suitable for use where the harmonics do not exceed those specified in NMI M 13-1:2022.

approved on 9/01/17

approved on 20/09/17

approved on 29/07/22

3×240 (415) V AC

approved on 25/06/25

A Secure model Sprint 211 polyphase direct connect static watt hour meter used to measure electric energy. This variant has the same Field of Operation and Features as the pattern except that it features an alternative communications module replacing 4G with CATM1/NBIoT communications. Applicable meters are marked accordingly and designated as 'Skyline-i 593' (Figure 5). Other markings on the meter have also been updated.

Description of Variant 5 6.

Description of Variant 4

5.

A Secure model Sprint 231 polyphase direct connect static watt hour meter used to measure electric energy. This variant has the same Field of Operation and Features as the pattern except that it features an alternative communications module replacing 4G with CATM1/NBIoT communications. Applicable meters are marked accordingly and designated as 'Skyline-i 593' (Figure 6). Other markings on the meter have also been updated.

7. **Description of Variant 6**

approved on 25/06/25

approved on 25/06/25

The pattern and variants are approved with a specified range of operation of -10 to 55 °C.

TEST PROCEDURE No 14/2/83

Instruments tested for verification shall comply with the certificate of approval and technical schedule, and the maximum permissible errors for verifications at the operating conditions in effect at the time of verification.

The maximum permissible errors are specified in the National Trade Measurement Regulations 2009 (Cth).

Electricity meters shall be verified in accordance with the following National Instrument Test Procedures:

- NITP 14.0 Utility meters general requirements
- NITP 14.2 Utility meters electricity meters

NOTE: NMI reserves the right to vary this procedure. Any such variation shall be notified in writing by NMI.



Secure Model Sprint 210 Electricity Meter (The Pattern)





Typical Mechanical Sealing



Secure Model Sprint 211 Electricity Meter (Variant 1)



Secure Model Sprint 231 Electricity Meter (Variant 2)



Secure Model Sprint 211 'Skyline-i 593' Electricity Meter (Variant 4)



Secure Model Sprint 231 'Skyline-i 593' Electricity Meter (Variant 5)

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