Australian Government
Department of Industry, Science and Resources

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 14/2/131

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.

Itron Australia Pty Ltd model NLC Class 1 Electricity Meter

submitted by Itron Australia Pty Ltd
8 Rosberg Rd
WINGFIELD SA 5013

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 13-1 *Active-Energy Electricity Meters. Part 1: Metrological and Technical Requirements*, June 2022.

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.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern approved – certificate issued	04/11/26

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 14/2/131' and only by persons authorised by the submittor.

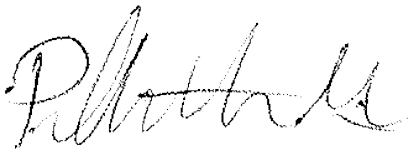
It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this 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.

Special – Street light metering

This approval is conditional on remote data access being made available to parties to the trade. On request data access must be made available for NMI. Data access must include:

- Measurement data (kWh)
- Mandatory descriptive markings (as specified in this approval)
- Verification information:
    - Copy of the applicable Batch Verification Certificate (where applicable), or
    - Status of individual verification including verification mark information.
- Location information (to be able to identify the specific location of the street light).

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



Phillip Mitchell
A/g Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No 14/2/1xx

1. Description of Pattern **approved on 04/11/26**

A Itron Australia Pty Ltd model NLC single phase Class 1 direct connected static watt hour meter (Figure 1) used to measure electrical energy.

1.1 Field of Operation

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

- Number of phases 1
- Number of wires 2
- Reference frequency 50 Hz
- Reference temperature 23 °C
- Reference ambient temperature ranges:
  - specified range of operation −40 to 70 °C
  - limit range of operation −40 to 70 °C
- Rated voltage 230 V AC
- Rated currents: Basic current, I_b 2.5 A
  Maximum current, I_{max} 8 A
- Meter constant 10000 imp/kWh
- Accuracy class 1
- Environment Australian Outdoor Meter

1.2 Features/Functions

- Internal synchronous clock.
- Measurement in positive direction only.

1.3 Verification Provision

Provision is made for the application of a verification mark.

1.4 Sealing Provision

The meter is designed as such that internal components cannot be accessed without causing permanent damage. Provision is also made for sealing of parameters that have a metrologically significant effect and that determine the measurement result by the application of solid state sealing.

1.5 Descriptive Markings

Instruments are clearly and permanently marked with the following data, in the vicinity of the indicating device, in the form shown right:

Manufacturer's mark, or name written in full	……..
Model designation	……..
Serial number	……..
Year of manufacture	……..
Pattern approval mark	NMI 14/2/1xx
Number of phases	……..
Number or wires	……..
Reference frequency	…….. Hz

Meter constant	……..
Rated voltage	…….. AC
Rated currents:	I_b …… A
	I_{max} ……. A
Accuracy class	...
Environment	Australian Outdoor Meter/AOM

1.6 Harmonics

Instruments purporting to comply with this approval are suitable for use where the harmonics do not exceed those specified in AS 62053.21:2018.

TEST PROCEDURE No 14/2/131

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.

FIGURE 14/2/131 – 1



Itron Australia Pty Ltd model NLC Electricity Meter

FIGURE 14/2/131 – 2



Itron Australia Pty Ltd model NLC Electricity Meter
(side view/marking)

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