

Australian Government

Department of Industry, Science, Energy and Resources

## National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

## **Certificate of Approval**

# NMI 14/2/54

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.

Landis & Gyr Pty Ltd T/A Landis+Gyr Model E350 U1300 Class 1 Electricity Meter

submitted by Landis+Gyr 241 O'Riordan St, Level 10 Mascot NSW 2020

**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 pathway 1 under document NMI M 6-1, Active-Energy *Electricity Meters*, version 3.0, July 2020.

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 – certificate issued	24/01/11
1	Variant 1 approved – certificate issued	09/08/13
2	Variant 2 approved – interim certificate issued	16/09/15
3	Pattern & variant 1 reviewed – variant 2 approved –	11/03/16
	certificate issued	
4	Variant 3 approved – certificate issued	17/11/20
5	Variants 4 & 5 approved – certificate issued	26/05/21

## DOCUMENT HISTORY

#### CONDITIONS OF APPROVAL

#### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 14/2/54' 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*.

**Darryl Hines** Manager Policy and Regulatory Services

## TECHNICAL SCHEDULE No 14/2/54

## 1. Description of Pattern

#### approved on 24/01/11

A Landis+Gyr model E350 U1300 Class 1 electronic single phase current direct connect 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 ambient		
	specified ran	-10 to 60°C	
	limit range of	f operation	-20 to 70°C
•	Rated voltage		240 V AC
•	Rated currents:	Rated current, $I_{b}$	10 A
		Maximum current, $I_{max}$	100 A
•	Meter constant		1 Wh/imp
•	Accuracy class		1

## 1.2 Features/Functions

- One (1) or two (2) elements
- Electronic (LCD) digital indicator
- Active energy measurement (Class 1)
- Optional integrated load control relay (40 A)
- 100 A disconnect relay
- Optional customer supply monitoring feature
- AMI communications options including Mesh Radio
- An internal crystal-controlled clock
- Bottom connect type base
- Measurement in positive and negative direction

#### **1.3 Verification Provision**

Provision is made for the application of a verification mark.

#### 1.4 Sealing Provision

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

## **1.5 Descriptive Markings and Notices**

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 14/2/54
Number of phases	
Number or wires	
Reference frequency	Hz
Temperature limits (if other than -10 to 60°C)	toºC (*)
Meter constant	
Rated voltage	AC
Rated currents:	I <sub>b</sub> A
	I <sub>max</sub> A
Accuracy index	Class 1

(\*) Optional marking.

## 2. Description of Variant 1

The pattern (model E350 U1300) now fitted with a synchronous clock.

## 3. Description of Variant 2

Certain other versions (types) of the E350 type U1300 series, with synchronous and crystal time-keeping, having the type numbers listed below:

U1310, U1311, U1315, U1322, U1325 and U1326.

## 4. Description of Variant 3

The pattern and other versions (types) of the E350 type U1300 series listed in variant 2 modified with respect to safety requirements. These are identified by a '3' or 'V' in the 9th character position of their catalogue number marked on the meter.

## 5. Description of Variant 4

The pattern and other versions (types) of the E350 type U1300 series listed in variants 1, 2 & 3 with Rated voltage – 230 V AC (Figure 3).

## 6. Description of Variant 5

The pattern and other versions (types) of the E350 type U1300 series listed in variants 1, 2 & 3 with Rated voltage – 220 V AC (Figure 4).

#### approved on 16/09/15

approved on 09/08/13

## approved on 26/05/21

approved on 26/05/21

approved on 17/11/20

#### TEST PROCEDURE No 14/2/54

Instruments tested for initial 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.

Meters shall be verified in accordance with NITP 14 National Instrument Test Procedures for Utility Meters.

Evidence of verification shall be confirmed via the meter serial number and certificate of verification issued by a utility meter verifier in accordance with NITP 14.

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

## FIGURE 14/2/54 - 1



Landis+Gyr Model E350 U1300 Class 1 Electricity Meter

FIGURE 14/2/54 – 2



Landis+Gyr Model E350 U1300 Electricity Meter Including Typical Sealing

## FIGURE 14/2/54 – 3



Landis+Gyr Model E350 U1300 Electricity Meter with nominal voltage - 230 V

Figure 14/2/54 – 4



Landis+Gyr Model E350 U1300 Electricity Meter with nominal voltage - 220 V

~ End of Document ~