

**Australian Government** 

Department of Industry, Innovation and Science

National Measurement Institute

# Certificate of Approval NMI 14/2/53

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 model E350 U3350 Class 0.5 Electricity Meter

submitted by Landis & Gyr Pty Ltd

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 document NMI M 6-1, *Electricity Meters, Part 1: Metrological and Technical Requirements*, July 2012.

This approval becomes subject to review on **1/04/21**, and then every 5 years thereafter.

## DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	26/11/10
1	Pattern approved – certificate issued	16/03/11
2	Pattern reviewed & updated – certificate issued	17/08/16
3	Variant 1 approved – certificate issued	23/06/20

## CONDITIONS OF APPROVAL

#### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 14/2/53' and only by persons authorised by the submittor.

Instruments currently marked 'NMI *P*14/2/53' may be re-marked 'NMI 14/2/53' but 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.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates No S1/0/A or No S1/0B.

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 14/2/53

#### 1. Description of Pattern prov

#### provisionally approved on 26/11/10 approved on 15/03/11

A Landis+Gyr model E350 U3350 electronic polyphase Class 0.5 current transformer (CT) operated 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	3
•	Number of wires	4
•	Reference frequency	50 Hz
•	Reference ambient temperature ranges:	
	specified range of operation	-10 to 60°C
	limit range of operation	-20 to 70°C
•	Reference voltage	240/415 V AC
•	Reference currents: Rated current, $I_n$	5 A
	Maximum current, I <sub>max</sub>	15 A
•	Meter constant	0.2 Wh/Imp
•	Accuracy class	0.5

## 1.2 Features/Functions

- Three (3) elements
- Electronic (LCD) digital indicator
- Optional integrated load control relay (31.5 A)
- AMI communications options including mesh radio
- Bottom connect type base
- Internal crystal clock
- Measurement in both positive and negative directions (export and import).

## **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 a solid state seal. The main cover is 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 14/2/53
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:	$I_n \dots A$
	I <sub>max</sub> A
Accuracy index	Class 0.5

(\*) Optional marking.

## 2. Description of Variant 1

#### approved on 23/06/20

A Landis+Gyr model E350 U3350 electronic polyphase Class 0.5 current transformer (CT) operated static watt hour meter with the same features and functions as the pattern, incorporating various modifications to hardware and software designed to comply with safety requirements (AS 62052.31:2017).

## TEST PROCEDURE

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.

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

FIGURE 14/2/53 - 1



# Landis+Gyr Model E350 U3350 Electricity Meter

FIGURE 14/2/53 – 2



Landis+Gyr Model E350 U3350 Electricity Meter – Typical Mechanical Sealing

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