

14/2/21
4 April 2012



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation
Certificate of Approval
No 14/2/21

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

This is to certify that the approval for use for trade granted in respect of the
AMPY Metering Model EchoA Electricity Meter

submitted by Landis & Gyr Pty Ltd
 60 O'Riordan Street
 Alexandria NSW 2015

has been cancelled in respect of new instruments as from 1 May 2012.

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

A handwritten signature in black ink, consisting of a series of loops and flourishes, positioned above a horizontal line.

14/2/21
28 February 2006



Australian Government
**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Certificate of Approval
No 14/2/21

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
Ampy Metering Model EchoA Electricity Meter

submitted by **Emwest Products Pty Ltd**
Trading as Ampy Email Metering
Joynton Avenue
Zetland NSW 2017.

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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 February 2011, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 14/2/21' and only by persons authorised by the submittor.

.../2

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.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

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

DESCRIPTIVE ADVICE

Pattern: approved 13 January 2006

- An Ampy Metering model EchoA single phase Class 1 static watt hour meter used to measure electrical energy.

Variant: approved 13 January 2006

1. Model EchoB which is similar to the pattern and which also has a pulse output. Technical Schedule No 14/2/21 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 14/2/21 dated 28 February 2006
Technical Schedule No 14/2/21 dated 28 February 2006 (incl. Test Procedure)
Figures 1 and 2 dated 28 February 2006

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



TECHNICAL SCHEDULE No 14/2/21

Pattern: Ampy Metering Model EchoA Electricity Meter

Submitter: Emwest Products Pty Ltd
Trading as Ampy Email Metering
Joynton Avenue
Zetland NSW 2017.

1. Description of Pattern

An Ampy Metering model EchoA electronic single phase Class 1 direct connected static watt hour meter (Figure 1) used to measure electrical energy.

1.1 Field of Operation

- Number of phases 1
- Number of wires 2
- Reference frequency 50 Hz
- Reference ambient temperature ranges:
 - specified range of operation -10 to 60°C
 - limit range of operation -20 to 70°C
- Rated voltage 240 V AC
- Rated currents: Basic current, I_b 5 A
Maximum current, I_{max} 100 A
- Accuracy index 1

1.2 Features/Functions

- 1 element.
- IEC standard optical communications port.
- Liquid crystal digital indicator having a maximum display of 99999.9 kW h.
- Double neutral port/terminal
- Bottom connect rectangular base.

1.3 Verification/Certification

Provision is made for the application of a verification/certification mark.

1.4 Sealing Provision

Provision is made for the calibration adjustments to be sealed by liquid welding the outer casing during manufacture. In addition, a destructible adhesive label is placed over the optical communications port (as shown in Figure 2) which will cover the input data port but allow output data to be read.

1.5 Descriptive Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark	...
Model designation	...
Serial number	...
Pattern approval mark	NMI 14/2/21
Number of phases	...
Number of wires	...
Reference frequency	... Hz
Temperature limits (if other than -10 to 60°C)	... to ...°C
Meter constant	...
Rated voltage	... AC
Rated currents:	I_b ... A
	I_{max} ... A
Accuracy index	...

2. Description of Variant 1

Model EchoB which is similar to the pattern and which also has a pulse output.

TEST PROCEDURE

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

TESTS

1. AC Voltage Test - at initial verification only.
2. Running With No Load - at subsequent verifications/certifications.
3. Starting.
4. Accuracy.



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Notification of Change
Certificate of Approval No 14/2/21
Change No 1

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

The following changes are made to the approval documentation for the

AMPY Metering Model EchoA Electricity Meter

submitted by Emwest Products Pty Ltd
 Joynton Avenue
 Zetland NSW 2017.

- A. In Certificate of Approval No 14/2/21 and its Technical Schedule both dated 28 February 2006, all references to the name and address of the submitter should be amended to read:

“Landis & Gyr Pty Ltd
60 O’Riordan Street
Alexandria NSW 2015.”

- B. In Certificate of Approval No 14/2/21 dated 28 February 2006;
1. The DESCRIPTIVE ADVICE should be amended by adding the following after the bullet point:
“May also be known as Landis & Gyr instruments of the same model.”
2. The FILING ADVICE should be amended by adding the following:
“Notification of Change No 1 dated 13 January 2009
- C. In Technical Schedule No 14/2/21 dated 28 February 2006, clause **1. Description of Pattern** should be amended by adding the following after the 1st paragraph:
“May also be known as Landis & Gyr instruments of the same model.”

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

A handwritten signature in black ink, appearing to be 'J. G. T.', written in a cursive style.

14/2/21
28 February 2006

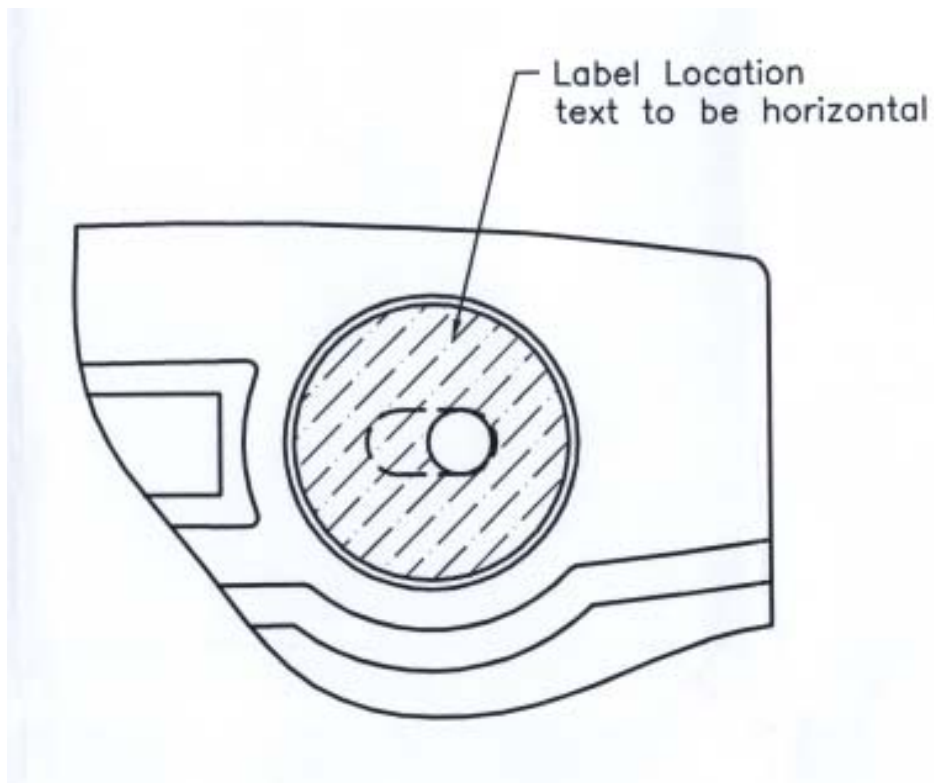
FIGURE 14/2/21 - 1



Ampy Metering Model EchoA Electricity Meter

14/2/21
28 February 2006

FIGURE 14/2/21 – 1



Showing Location of Sealing Label Over Optical Port