



Bradfield Road, West Lindfield NSW 2070

## Certificate of Approval

### No 14/2/42

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

PRI Model *i*-Credit 500 Class 1 Electricity Meter

submitted by       Secure Australasia Pty Ltd  
                          (formerly PRI Australasia Pty Ltd)  
                          258 Darebin Road  
                          FAIRFIELD   VIC   3078.

**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, *Pattern Approval and Initial Verification of Electricity Meter and Associated Transformers: Definitions, Metrological and Technical Requirements*, July 2004.

#### CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 June 2014, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 14/2/42' and only by persons authorised by the submitter.

It is the submitter'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 28 May 2009

- A PRI model *i*-Credit 500 electronic single phase Class 1 direct connect static watt hour meter used to measure electrical energy.

Technical Schedule No 14/2/42 describes the pattern.

**Variant:** approved 27 November 2009

1. Having two (2) elements.

Technical Schedule No 14/2/42 Variation No 1 describes variant 1.

**Variant:** approved 27 July 2010

2. With a field replaceable communications module.

Technical Schedule No 14/2/42 Variation No 2 describes variant 2.

#### FILING ADVICE

Certificate of Approval No 14/2/42 dated 25 February 2010 is superseded by this certificate, and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 14/2/42 dated 28 July 2010

Technical Schedule No 14/2/42 dated 14 October 2009 (incl. Test Procedure)

Technical Schedule No 14/2/42 Variation No 1 dated 25 February 2010

Technical Schedule No 14/2/42 Variation No 2 dated 28 July 2010 (incl. Notification of Change)

Figures 1 and 2 dated 14 October 2009

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 14/2/42

**Pattern:** PRI Model *i*-Credit 500 Class 1 Electricity Meter

**Submitter:** PRI Australasia Pty Ltd  
258 Darebin Road  
FAIRFIELD VIC 3078.

### 1. Description of Pattern

A PRI model *i*-Credit 500 electronic 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 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,  $I_b$  15 A  
Maximum current,  $I_{max}$  100 A
- Accuracy index 1

#### 1.2 Features/Functions

- One (1) element.
- Electronic (LCD) digital indicator.
- Active energy measurement (Class 1).
- Integrated load control relays (31.5 A or 60 A).
- 100 A disconnect relay.
- AMI communications options including Mesh Radio.
- Bottom connect type 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 the application of one or more mechanical seals (Figures 1 and 2).

### 1.5 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 14/2/42
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	Class 1

(\*) Optional marking.

### 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.

TECHNICAL SCHEDULE No 14/2/42  
VARIATION No 1

**Pattern:** PRI Model *i*-Credit 500 Class 1 Electricity Meter



**Submittor:** PRI Australasia Pty Ltd  
258 Darebin Road  
FAIRFIELD VIC 3078

**1. Description of Variant 1**

A PRI model *i*-Credit 500 electronic single phase Class 1 direct connected static watt hour meter similar to the pattern but having two (2) elements.



The field of operation of this variant is the same as described for the pattern in clause **1.1 Field of Operation** in Technical Schedule No 14/2/42, except for the following characteristic:

- Rated currents: Basic current,  $I_b$  10 A

TECHNICAL SCHEDULE No 14/2/42  
VARIATION No 2

**Pattern:** PRI Model *i*-Credit 500 Class 1 Electricity Meter

**Submittor:** Secure Australasia Pty Ltd  
258 Darebin Road  
FAIRFIELD VIC 3078

**1. Description of Variant 2**

A PRI (aka Secure) model *i*-Credit 500 one (1) and two (2) element meters as described for the pattern and variant 1, now fitted with field replaceable communications module.

NOTIFICATION OF CHANGE

- A. In Technical Schedule No 14/2/42 dated 14 October 2009 and in Technical Schedule No 14/2/42 Variation No 1 dated 25 February 2010, all references to the name of the submittor should be amended to read:
- “Secure Australasia Pty Ltd”
- B. In Technical Schedule No 14/2/42 dated 14 October 2009, clause **1. Description of Pattern** should be amended by adding the following:
- “May also be known as ‘Secure’ instruments of the same model.”
- C. In Technical Schedule No 14/2/42 dated Variation No 1 dated 25 February 2010, clause **1. Description of Variant 1** should be amended by adding the following:
- “May also be known as ‘Secure’ instruments of the same model.”

FIGURE 14/2/42 – 1



PRI Model i-Credit 500 Electricity Meter  
(including typical sealing)

14/2/42  
14 October 2009

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PRI Model i-Credit 500 Electricity Meter – Additional Sealing