



EC Type Examination Certificate Number: **0120/ SGS0224**

Holley Technology Ltd

No. 181 Wuchang Avenue
Yuhang District
Hangzhou 310023
China

Instrument Identification:
AES110B

Instrument Traceable Number
0120/ SGS0224

Single phase, Active Import/Export (kWh), Electricity Meter

has been assessed and certified as meeting the requirements of

EC Directive 2014/32/EU **on Measuring Instruments Annex II, Module B**

It is certified that the manufacturer's technical design and specimen for the above instrument has been examined and, based on the evidence submitted, it is considered that the instrument conforms to the requirements of Annex V of EC Directive 2014/32/EU

This certificate must be used in conjunction with a certificate covering the product verification as required in Annex II, Module D or Annex II, Module F

This certificate is valid for 10 years from 16th June 2016 until 15th June 2026
Issue 1


Certification is based on report number(s) SHES151200801601 dated 16th June 2016

Authorised Signature

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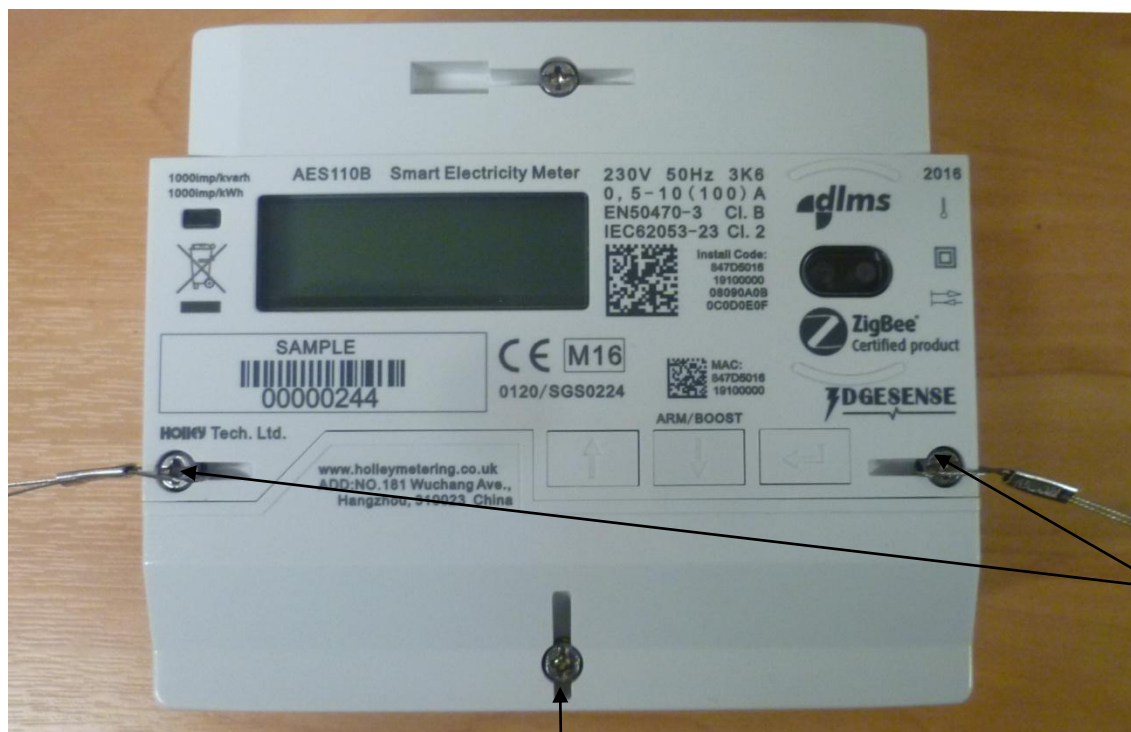
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1. Technical Data

Manufacturer	Holley Technology Ltd
Meter Type	AES110B
Voltage Rating (U_n)	230V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0,5-10(100)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No	ES1BA10T
Identification Location	LCD
Bill Of Materials Number	Mechanical parts – 3.417.910.JG Components – 3.417.910.QJ
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	1000 imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Wire & Crimp
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Terminal Arrangement(s)	BS


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2. Photograph of Meter and Sealing Plan

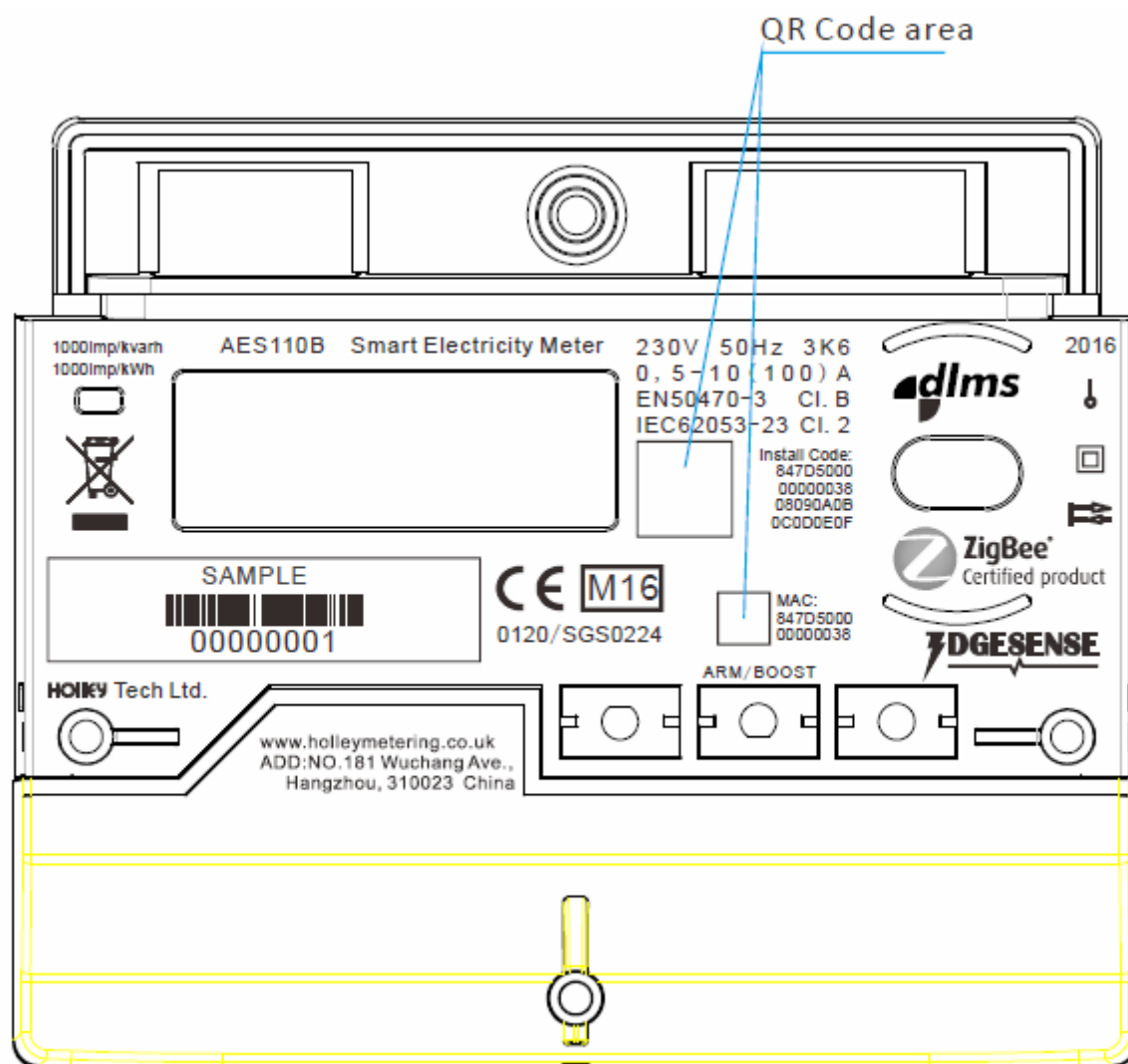



Main cover seals

Terminal cover seal

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3. Nameplate



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4. Calculation of the composite error/ MPE


Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
I _{min}	1.0	0.09	0.10	0.09	0.08	0.08	0.09
I _{tr}	1.0	0.07	0.07	0.07	0.06	0.06	0.07
10I _{tr}	1.0	0.08	0.08	0.08	0.07	0.07	0.08
I _{max}	1.0	0.25	0.22	0.19	0.17	0.17	0.18
I _{tr}	0.5ind	0.09	0.07	0.06	0.05	0.07	0.11
10I _{tr}	0.5ind	0.09	0.08	0.06	0.06	0.08	0.12
I _{max}	0.5ind	0.41	0.37	0.34	0.31	0.30	0.31
I _{tr}	0.8cap	0.08	0.08	0.08	0.07	0.07	0.07
10I _{tr}	0.8cap	0.08	0.09	0.08	0.08	0.08	0.08
I _{max}	0.8cap	0.35	0.32	0.29	0.27	0.26	0.26

During the type approval examination the influence factors for temperature, frequency and voltage are determined per load point. The table above represents the sum of the square values per load, determined via the following formula:-

$$\delta e(T, U, f) = \sqrt{(\delta e^2(T, I, \cos\varphi) + \delta e^2(U, I, \cos\varphi) + \delta e^2(f, I, \cos\varphi))}$$

where

$\delta e(T, I, \cos\varphi) =$ Additional error due to variation of the temperature at the same load
 $\delta e(U, I, \cos\varphi) =$ Additional error due to variation of the voltage at the same load
 $\delta e(f, I, \cos\varphi) =$ Additional error due to variation of the frequency at the same load


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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
AES110B	230V 0.5-10(100)A 1p2w Single phase, active import/export (kWh), electricity meter

Modifications to the meter(s) described according to approval No.**0120/ SGS0224** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

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6. Document Revision History

Issue	Date	Comments
1	16/06/2016	Initial Issue