



EU Type Examination Certificate Number: **0120/ SGS0285**

# Honeywell Elster Metering Limited

Tollgate Business Park  
Beaconside  
Stafford  
ST16 3EF

Instrument Identification:  
**AS302P**

**Single Phase, Import/Export (kWh), Pre-payment, Smart Meter**

Instrument Traceable Number  
**0120/ SGS0285**

has been assessed and certified as meeting the requirements of

## **EU 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 EU 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 until 25<sup>th</sup> April 2027  
Issue 7


Certification is based on report number(s) EMA235643/2/MID dated 28<sup>th</sup> March 2017, EMA235643/2a date 17<sup>th</sup> October 2017

Authorised Signature

SGS United Kingdom Limited, Notified Body 0120  
Unit 202B Worle Parkway, Weston-super-Mare, BS22 6WA UK  
t +44 (0)1934 522917 f +44 (0)1934 522137 [www.sgs.com](http://www.sgs.com)


Contact Address  
SGS United Kingdom Ltd, Units 12A & 12B, South Industrial Estate, Bowburn, Durham, DH6 5AD UK

t +44 (0)191 377 2000 f +44 (0)191 377 2020 [www.sgs.com](http://www.sgs.com)

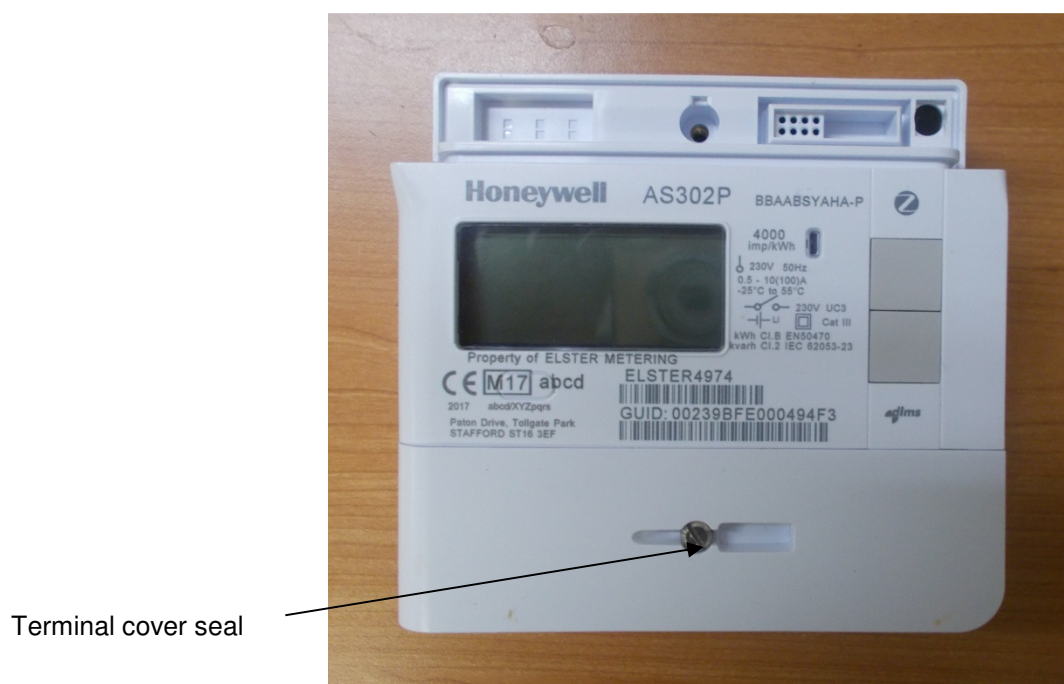
	EU-Type Examination Certificate Number:	
	<b>0120/ SGS0285</b>	
	Issue Number: 7	Dated:1 <sup>st</sup> July 2019


## 1. Technical Data

Manufacturer	Honeywell Elster Metering Ltd
Meter Type	AS302P
Voltage Rating ( <i>Un</i> )	230V
Current Rating ( <i>I<sub>min</sub></i> – <i>I<sub>ref</sub></i> ( <i>I<sub>max</sub></i> ))	0.25-5(100)A
Frequency ( <i>Fn</i> )	50Hz
Active Accuracy Class ( <i>kWh</i> )	A or B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	MSP 09.02.05-46010, MSP09.02.07-55603, MSP09.02.08-60279, MSP 09.03.02-60367
CRC Checksum No's	MSP09.02.05-46010: <b>0xBDBA</b> MSP09.02.07-55603: <b>0xC9E4</b> MSP09.02.08-60279: <b>0x03B9</b> MSP09.03.02-60367: <b>0x78DC</b>
Identification Location	LCD
Bill Of Materials No's	JG0562 011A, JG0562 021D (with relay) JG0562 012A, JG0562 022D (no relay)
IP Rating	IP53
Insulation Protective Class	Class II
LED Pulse Constant	4000imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Wire & Crimp or 2 x Shear Head Screws & Year Marked Cap
Terminal 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
Location of Manufacturers Address	Nameplate

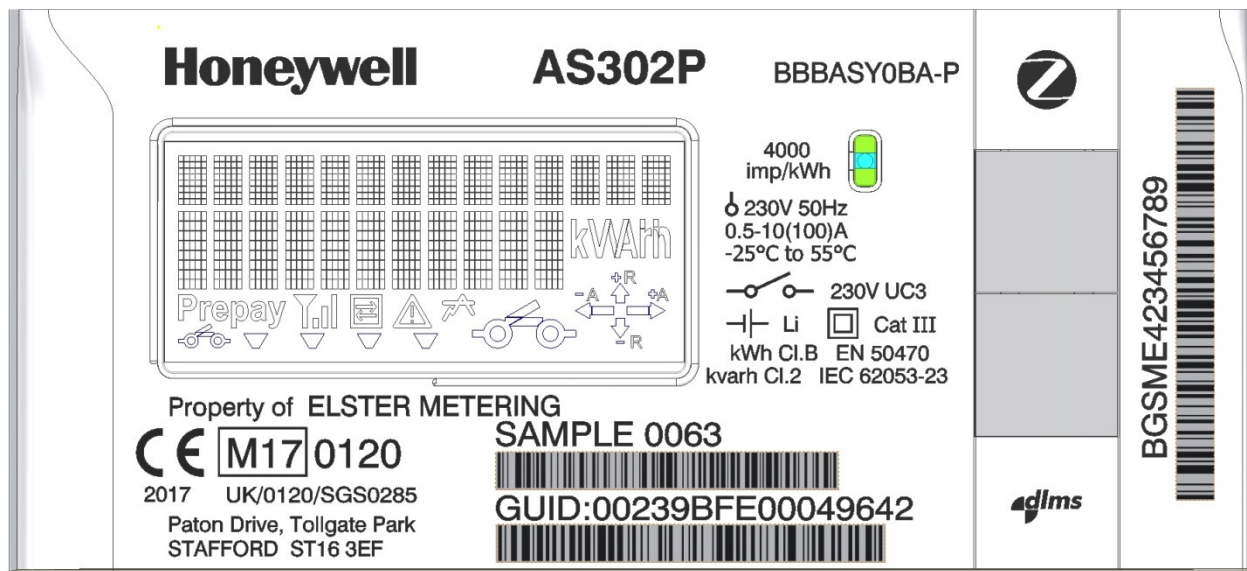
	EU-Type Examination Certificate Number:	
	<b>0120/ SGS0285</b>	
	Issue Number: 7	Dated: 1 <sup>st</sup> July 2019


## 2. Photograph of Meter and Sealing Plan



	EU-Type Examination Certificate Number:	
	<b>0120/ SGS0285</b>	
	Issue Number: 7	Dated: 1 <sup>st</sup> July 2019

### 3. Nameplate



	EU-Type Examination Certificate Number:	
	<b>0120/ SGS0285</b>	
	Issue Number: 7	Dated:1 <sup>st</sup> July 2019

#### 4. Calculation of the composite error/ MPE


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

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

where

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


		Influence factors for temperature, frequency and voltage					
Current	PF Cos	-25 °C	-10 °C	5 °C	30 °C	40 °C	55 °C
I <sub>min</sub>	1.0	0.34	0.38	0.12	0.12	0.12	0.14
I <sub>tr</sub>	1.0	0.17	0.12	0.05	0.05	0.06	0.07
10I <sub>tr</sub>	1.0	0.09	0.07	0.04	0.04	0.04	0.05
I <sub>max</sub>	1.0	0.06	0.05	0.03	0.03	0.03	0.03
I <sub>tr</sub>	0.5ind	0.18	0.14	0.10	0.11	0.17	0.18
10I <sub>tr</sub>	0.5ind	0.12	0.11	0.08	0.07	0.07	0.08
I <sub>max</sub>	0.5ind	0.05	0.04	0.05	0.02	0.02	0.03
I <sub>tr</sub>	0.8cap	0.20	0.13	0.11	0.11	0.12	0.18
10I <sub>tr</sub>	0.8cap	0.06	0.03	0.02	0.02	0.02	0.02
I <sub>max</sub>	0.8cap	0.04	0.03	0.02	0.02	0.02	0.03

	EU-Type Examination Certificate Number:	
	0120/ SGS0285	
	Issue Number: 7	Dated: 1 <sup>st</sup> July 2019

## 5. Annex of Variants


### SINGLE PHASE (AS302P) MODEL CODE

				MODEL															
				TYPE (Nameplate ▼)															
TYPE/MODEL				A S 3 0 2 P - B A B A A S Y A A A - P A A															
<b>CONNECTION/TERMINATION</b>																			
Single Phase, BS terminal arrangement (L-N-N-L)				B															
<b>CURRENT RANGE</b>																			
Direct Connected 20A – * (* is any multiple of Ib/Iref up to 100A max.)				A															
Direct Connected 10A – * (* is any multiple of Ib/Iref up to 100A max.)				B															
Direct Connected 5A – * (* is any multiple of Ib/Iref up to 100A max.)				C															
<b>VOLTAGE/ ACCURACY CLASS</b>																			
220 – 240V 50 Hz Cl.B kWh,(EN 50470-3) Cl.1 kWh, Cl.2 kvarh (IEC 62053-21, 23)-- see note 2)				B															
220 – 240V 50 Hz Cl.A kWh,(EN 50470-3) Cl.2 kWh, Cl.3 kvarh (IEC 62053-21, 23) --see note 2)				A															
<b>MAIN FEATURE OPTIONS (Firmware Dependant)</b>																			
UK Compliant SMETS2 meter MSP 09.02.05-46010				A															
UK Compliant SMETS2 meter MSP 09.02.07-55603				B															
UK Compliant SMETS2 meter MSP 09.02.08-60279				C															
UK Compliant SMETS2 meter MSP 09.03.02-60367				D															
<b>DISPLAY OPTION</b>																			
Dot Matrix Display 2 line no backlight				A															
Dot Matrix Display 2 line with backlight				B															
<b>DISCONNECT SWITCH</b>																			
Single Pole Switch				S															
None				N															
<b>TERMINAL, MAIN COVER &amp; MAGNETIC DETECTION (does not include ICHI tamper)</b>																			
All				Y															
None				N															
<b>OUTPUT OPTIONS ICHI (Intimate Communications Hub Interface)</b>																			
ICHI 12V DC connection, mandated connections only				A															
<b>ADDITIONAL OUTPUT OPTIONS</b>																			
No auxiliary relay output				A															
230V 2A auxiliary relay output				H															
<b>ZigBee Communication</b>																			
ZigBee SEP (Firmware version 5.8.1)				A															
<b>FIRMWARE (FEATURE SET)</b>																			
Original SMETS2				P															
<b>REVISIONS FIRMWARE SUFFIX</b>																			
ASP09.01.23-57858				A															
ASP09.01.30-60439				B															
ASP09.01.33-61045				C															

	EU-Type Examination Certificate Number:	
	<b>0120/ SGS0285</b>	
	Issue Number: 7	Dated:1 <sup>st</sup> July 2019

<b>REVISIONS HARDWARE</b>			
None			A
Rev G PCBA			B
Rev G2 PCBA			C
Rev H PCBA			D

Modifications to the meter(s) described according to approval No.**0120/ SGS0285** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

	EU-Type Examination Certificate Number:	
	<b>0120/ SGS0285</b>	
	Issue Number: 7	Dated:1 <sup>st</sup> July 2019

## 6. Document Revision History

Issue	Date	Comments
1	26/04/2017	Initial Issue
2	17/10/2017	Minor change to PCB layout & new firmware version
3	05/09/2018	Two 8.000MHz crystals changed to 8.057MHz crystals
4	28/11/2018	New firmware version MSP09.02.08-60279
5	07/01/2019	Product variant identification updated
6	08/04/2019	New firmware version MSP 09.03.02-60367 & BOM versions JG0562 021D (with relay), JG0562 022D (no relay). Updated model code.
7	01/07/2019	Checksum number MSP09.03.03-60367 corrected to MSP09.03.02-60367

“This document is issued by the Company subject to its General Conditions of Service available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms-e-document.htm](http://www.sgs.com/terms-e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.”

“Unless otherwise stated the results shown in this test certificate refer only to the sample(s) tested *and such sample(s) are retained for 28 days only.*”

**\*\* End of Document \*\***