



EU Type Examination Certificate Number: **0120/SGS0404**

## **Wasion Group Limited**

No.468 WestTongzipo Road  
High-Tech Industrial Development Zone  
410205  
Changsha City  
HuNanProvince  
P.R China

Instrument Identification:  
**Hymeter 100**

**Single Phase, Import/Export (KWh), Multi-rate, Smart, Electricity Meter**

Instrument Traceable Number  
**0120/SGS0404**

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 for 10 years from 14<sup>th</sup> February 2019 until 13<sup>th</sup> February 2029  
Issue 1

Certification is based on report number(s) SHES181101376501 dated 14<sup>th</sup> February 2019  
EMA264209/1/TR50579 dated 13<sup>th</sup> February 2019, EMA264209/1

Authorised Signature


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	Issue Number: 1	Dated: 14 <sup>th</sup> February 2019

## 1. Technical Data


<b>Manufacturer</b>	Wasion Group Limited
<b>Meter Type</b>	Hymeter 100
<b>Voltage Rating (<math>U_n</math>)</b>	115 - 276V
<b>Current Rating (<math>I_{min} - I_{ref} (I_{max})</math>)</b>	0.25-5(60)A
<b>Frequency (<math>F_n</math>)</b>	50Hz
<b>Active Accuracy Class (<math>kWh</math>)</b>	B (kWh)
<b>Type of circuit</b>	1p2w
<b>Temperature Range</b>	-40°C to +70°C
<b>Software/ Firmware Version No.</b>	A0401010
<b>CRC Checksum No.</b>	9B46D685
<b>Identification Location</b>	LCD
<b>Bill Of Materials Number</b>	20190115
<b>IP Rating</b>	IP54
<b>Insulation Protective Class</b>	Class II
<b>LED Pulse Constant</b>	1600imp/kWh
<b>Impulse Voltage Rating</b>	6kV
<b>AC Voltage Rating</b>	4kV
<b>Main Cover Sealing Type</b>	Wire & Crimp
<b>Integrity of meter</b>	Inaccessible without breaking seals
<b>Intended Location of the Meter</b>	Indoor
<b>Type of Register</b>	LCD
<b>Terminal Arrangement(s)</b>	DIN
<b>Location of Manufacturers Address</b>	Nameplate

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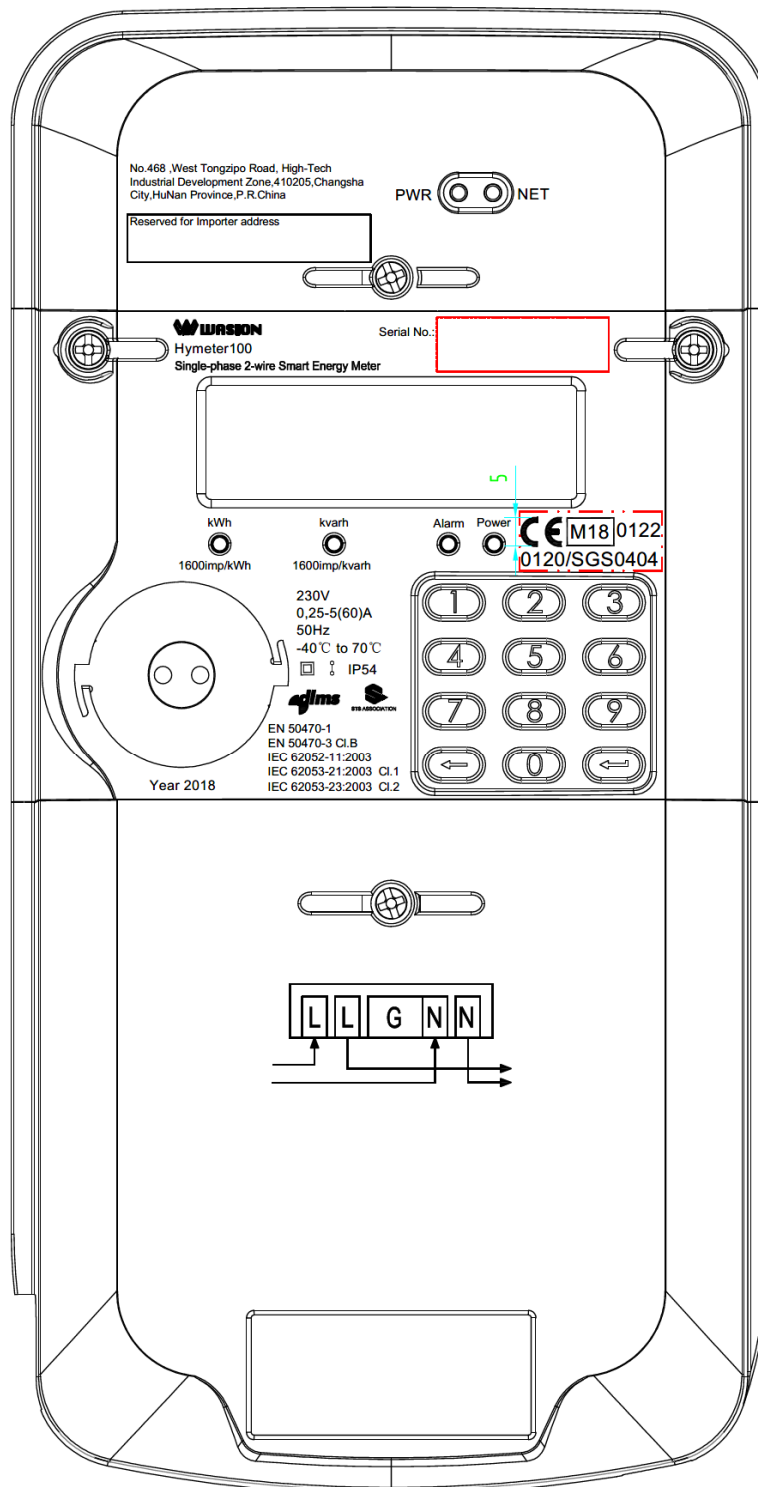
## 2. Photograph of Meter and Sealing Plan




Main Cover  
Sealing Points

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### 3. Example of Nameplate



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#### 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, Voltage & Frequency							
Current	PF Cos	-40 °C	-25 °C	-10 °C	5 °C	30 °C	40 °C	55 °C	70 °C
I <sub>min</sub>	1.0	0.52	0.41	0.28	0.16	0.03	0.08	0.19	0.26
I <sub>tr</sub>	1.0	0.51	0.38	0.25	0.13	0.04	0.11	0.21	0.31
10I <sub>tr</sub>	1.0	0.52	0.39	0.25	0.14	0.04	0.11	0.22	0.30
I <sub>max</sub>	1.0	0.29	0.22	0.15	0.09	0.02	0.07	0.15	0.21
I <sub>tr</sub>	0.5ind	0.34	0.34	0.23	0.13	0.06	0.12	0.21	0.31
10I <sub>tr</sub>	0.5ind	0.35	0.35	0.24	0.13	0.04	0.12	0.23	0.33
I <sub>max</sub>	0.5ind	0.20	0.20	0.13	0.08	0.04	0.08	0.16	0.24
I <sub>tr</sub>	0.8cap	0.38	0.38	0.26	0.16	0.05	0.10	0.19	0.26
10I <sub>tr</sub>	0.8cap	0.38	0.38	0.25	0.13	0.05	0.12	0.21	0.30
I <sub>max</sub>	0.8cap	0.23	0.23	0.14	0.08	0.04	0.08	0.14	0.18


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## 5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
Hymeter 100	Single Phase, 115 - 276V, 0.25-5(60)A, 50Hz

Modifications to the meter(s) described according to approval No.**0120/SGS0404** 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	14/02/2019	Initial Issue

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**END OF CERTIFICATE**