



Certificate of Constancy of Performance

This is to certify that:

Garvan Enterprises Limited

Room 16-17, 21/F, Wing Hing Industrial Building
83-93 Chai Wan Kok Street
Tsuen Wan
New Territories
Hong Kong

Holds Certificate No:

0086-CPR-550565

In respect of:

EN 14604:2005

Mains and Battery Powered Smoke Alarms

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the above construction product.

This certificate attests that all the provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the above standard under system 1+/1 are applied and that the products fulfil all the prescribed requirements set out above.

For and on behalf of BSI,
a Notified Body for the above Regulation
(Notified Body Number 0086):



Gary Fenton, Global Assurance Director

This certificate remains valid as long as the test methods and/or factory production control requirements included in the harmonised standard(s), used to assess the performance of the declared characteristics, do not change and the product(s), and the manufacturing conditions in the plant(s) are not modified significantly.

First Issued: 26 August 2009

Latest Issue: 11 June 2014

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Certificate of Constancy of Performance

No. **0086-CPR-550565**

Manufacturing Plant:

China Resources Electronic Co., Limited
Zhonglutian Industrial Zone
Baiyun Zone
Guangzhou
510550
China

Product Information

Mains Powered Smoke Alarms

Model Reference	Type
GNS-2236RF	Photoelectric Smoke Alarm with Battery Back-up, Alarm Silence and RF Interconnect Function
GNS-2236	Photoelectric Smoke Alarm with Battery Back-up and Alarm Silence Function

Battery Powered Smoke Alarms

Model Reference	Type
MTS-166RF	Photoelectric Smoke Alarm with Alarm Silence Function and Non User Replaceable 3V Battery
MTS-166/9V	Photoelectric Smoke Alarm with Alarm Silence Function, RF Interlink and User Replaceable 9V Battery
MSA-866	Photoelectric Smoke Alarm with Alarm Silence Function and Non User Replaceable 3 V Battery

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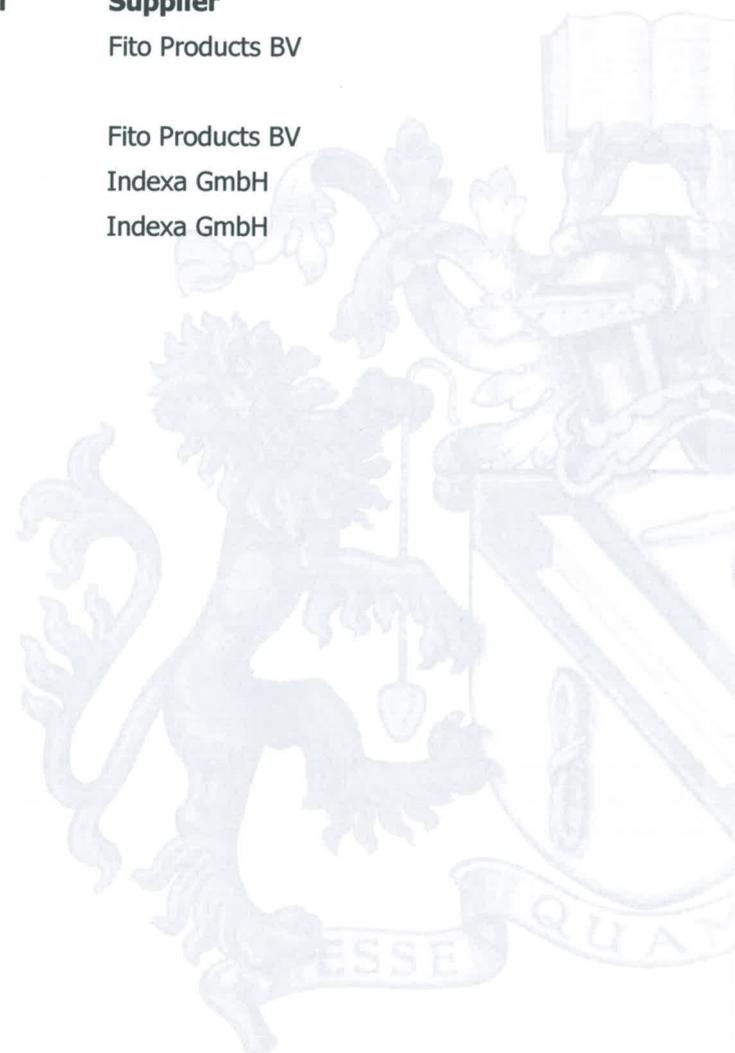


Certificate of Constancy of Performance

No. **0086-CPR-550565**

Product Information (continued)

Garvan Product Model	Alternative Branded Model	Supplier
GNS-2236RF	FIT-230RF	Fito Products BV
GNS-2236	FIT-230 RA702B RA702LB	Fito Products BV Indexa GmbH Indexa GmbH



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Certificate of Constancy of Performance

No. **0086-CPR-550565**

Appendix 1

Harmonised Technical Specification		EN 14604:2005
Essential Characteristics	Performance	Clause
Nominal activation conditions / sensitivity / response delay (response time) and performance under fire conditions		
Smoke alarm signals	Pass	4.12
Repeatability	Pass	5.2
Directional dependence	Pass	5.3
Initial sensitivity	Pass	5.4
Air movement	Pass	5.5
Dazzling	Pass	5.6
Fire sensitivity	Pass	5.15
Sound output	Pass	5.17
Sounder durability	Pass	5.18
Alarm silence facility	Pass	5.20
Operational Reliability		
Compliance	Pass	4.1
Individual alarm indicator	Pass	4.2
Mains on indicator	Pass	4.3
Connection of external ancillary devices	Pass	4.4
Means of calibration	Pass	4.5
User replaceable components	Pass	4.6
Normal power source	Pass	4.7
Standby power source	Pass	4.8
Electrical safety requirements	Pass	4.9, 5.24
Routine test facility	Pass	4.10
Terminals for external conductors	Pass	4.11
Battery removal indication	Pass	4.13
Battery connections	Pass	4.14
Battery capacity	Pass	4.15
Protection against the ingress of foreign bodies	Pass	4.16
Marking and data	Pass	4.19
Impact	Pass	5.11
Battery fault warning	Pass	5.16
Battery reversal	Pass	5.22
Backup power source	Pass	5.23

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Certificate of Constancy of Performance

No. **0086-CPR-550565**

Appendix 1 (continued)

Harmonised Technical Specification		EN 14604:2005
Essential Characteristics	Performance	Clause
Tolerance to supply voltage		
Variation in supply voltage	Pass	5.21
Durability of Operational Reliability		
Dry heat	Pass	5.7
Cold (operational)	Pass	5.8
Damp heat (operational)	Pass	5.9
Sulphur dioxide (SO ₂) corrosion	Pass	5.10
Vibration (operational)	Pass	5.12
Vibration (endurance)	Pass	5.13
Durability of Operational Reliability, Electrical Stability		
Electromagnetic compatibility (EMC), immunity (operational)	Pass	5.14

Garvan Enterprises Ltd.

Rm 16-17, 21/F, Wing Hing Ind. Bldg.,
83-93 Chai Wan Kok St., Tsuen Wan, N.T. Hong Kong.
Tel : 852-2402 8768 Fax : 852-2417 2528
E-mail : garvan@pacific.net.hk
Website*http://www.garvan.com.hk*



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CE Declaration

Garvan Enterprises Limited is a company who designs and manufactures of security product of smoke alarm, gas alarm, and Carbon Monoxide Alarm since 1987. The factory of Garvan is recognized as an ISO standard facility in China.

Manufacturer : Garvan Enterprises Limited
License-Holder : Garvan Enterprises Limited
Address : Unit 16-17, 21/F Wing Hing Ind. Bldg., 83-93 Chai Wan Kok Street,
Tsuen Wan, N. T., Hong Kong

Declare that:

Buyer : Elmes Elmes Electronic,
Address : Avicenny 2 Str, 54-611 Wroclaw, Poland
Kind of Equipment : 9V Mini Photoelectric Smoke Alarm with Hush
(with 9V battery)
Model No. : MTS-166/9V
Order No. : E#20140213 (Email on 13th Feb, 2014)
Order Quantity : 3,024 pcs.

In accordance with the following Directive:

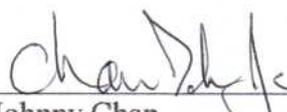
89/106/EEC
305/2011/EU

Has been tested to the following standard(s):

BS EN 14604:2005

I hereby declare that the equipment named above have been found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the directives.

For and on behalf of
Garvan Enterprises Ltd.


Johnny Chan
Assistant to Director



Garvan Enterprises Ltd.

Rm 16-17, 21/F, Wing Hing Ind. Bldg.,
83-93 Chai Wan Kok St., Tsuen Wan, N.T. Hong Kong.
Tel : 852-2402 8768 Fax : 852-2417 2528
E-mail : garvan@pacific.net.hk
Website "http://www.garvan.com.hk"



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EC – Declaration of Conformity

24th June 2014

We; GARVAN ENTERPRISES LTD.
Unit 16-17, 21/F Wing Hing Ind. Bldg.
83-93 Chai Wan Kok Street
Tsuen Wan, NT, Hong Kong

Declare that:

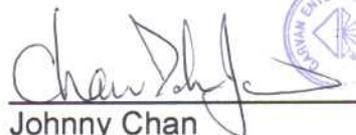
Smoke alarm model no. MTS-166/9V (photoelectric smoke alarm with alarm silence function and user replaceable 9V battery)

In accordance with the following Directive:
89/106/EEC
305/2011/EU

Has been tested to the following standard/s:
EN 14604:2005

I hereby declare that the equipment named above have been found to comply with the relevant sections of the above referenced specifications. The unit complies with all essential requirements of the directives.

For and on behalf of
Garvan Enterprises Ltd.


Johnny Chan
Asst. to Director



Garvan Enterprises Ltd.

Rm 16-17, 21/F, Wing Hing Ind. Bldg.,
83-93 Chai Wan Kok St., Tsuen Wan, N.T. Hong Kong.
Tel : 852-2402 8768 Fax : 852-2417 2528
E-mail : garvan@pacific.net.hk
Website "http://www.garvan.com.hk"



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DECLARATION OF PERFORMANCE No. ELMES-MTS166/9V-0086-CPR-0565

1. Unique identification code of the product-type:

MTS-166/9V
2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):

Optical Smoke Alarm MTS-166/9V
3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

Fire Safety and installed in buildings
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant Article 11(5):

Garvan Enterprises Limited
Unit 16-17, 21/F Wing Hing Ind. Bldg.
83-93 Chai Wan Kok Street
Tsuen Wan, NT, Hong Kong
5. Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2):

Elmes Electronic,
Avicenny 2 Str,
54-611 Wroclaw,
Poland
6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:

System 1

7. In case of the declaration of performance concerning a construction product covered by a harmonised standard:

The British Standards Institution performed type testing and the initial inspection of the manufacturing plant and of the factory production control with continuous surveillance assessment and approval of the factory production control under system 1 and issued the EC certificates of conformity: 0086-CPR-550565

8. Declared performance

Essential characteristics	Performance	Harmonized technical specification
		EN 14604: 2005
Nominal activation conditions/ Sensitivity, Response delay (response time) and Performance under fire conditions	PASS	4.12, 5.2, 5.3, 5.4, 5.5, 5.6, 5.15, 5.17, 5.18, 5.20
Operational reliability	PASS	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.13, 4.14, 4.15, 4.16, 4.19, 5.11, 5.16, 5.22, 5.23, 5.24
Tolerance to supply voltage	PASS	5.21
Durability of operational reliability - Dry Heat and Cold (operational)	PASS	5.7, 5.8
Durability of operational reliability - Vibration (operational and endurance)	PASS	5.12, 5.13
Durability of operational reliability – Damp heat (operational)	PASS	5.9
Durability of operational reliability – Sulphur dioxide (SO ₂) corrosion	PASS	5.10
Durability of operational reliability, electrical stability	PASS	5.14
Notes: The products covered by this standard are assumed to operate, in an event of fire, before the fire becomes so large as to affect their functioning. There is therefore no requirement to function when exposed to direct attack from fire.		

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Certified in accordance with :
Quality Management System : ISO 9001:2008
BSI Standard – BS EN 14604:2005

Signed for and on behalf of
Garvan Enterprises Limited

HONG KONG 24/06/2014
Place and date of issue

Chen Sheng
Signature 



Kitemark™ Licence

This is to certify that:

Garvan Enterprises Limited

Room 16-17, 21/F
Wing Hing Industrial Building
83-93 Chai Wan Kok Street
Tsuen Wan
New Territories
Hong Kong

Holds Kitemark Licence Number:

KM 544515

In respect of:

BS EN 14604

Domestic Smoke Alarms

This issues the right and Licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Licence shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Licence provided at or from the above address.

For and on behalf of BSI:

Gary Fenton, Global Assurance Director

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Latest Issue: 11/06/2014



No. KM 544515

BS EN 14604:2005 - Smoke alarm devices.

Mains Powered Smoke Alarms

Model Reference	Type
GNS-2236RF	Photoelectric Smoke Alarm with Battery Back-up, Alarm Silence and RF Interconnect Function.
GNS-2236	Photoelectric Smoke Alarm with Battery Back-up and Alarm Silence Function.

Battery Powered Smoke Alarms

Model Reference	Type
MTS-166RF	Photoelectric Smoke Alarm with Alarm Silence Function, RF Interlink and User Replaceable 9V Battery.
MTS-166/9V	Photoelectric Smoke Alarm with Alarm Silence Function and User Replaceable 9V Battery.
MSA-866	Photoelectric Smoke Alarm with Alarm Silence Function and Non User Replaceable 3V Battery.

First Issued: 5/08/2009

Latest Issue: 11/06/2014

No. KM 544515

The above products may be Kitemarked when branded with the following trademarks. For the purposes of traceability, the Kitemark licence number must appear adjacent to the Kitemark symbol on all branded products:

Garvan Product Model	Alternative Branded Model	Supplier
GNS-2236RF	FIT-230RF	Fito Products BV
GNS-2236	FIT-230	Fito Products BV
	RA702B	Indexa GmbH
	RA702LB	Indexa GmbH

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This Licence remains the property of The British Standards Institution and shall be returned immediately upon request.
To check its validity telephone +44 (0)845 080 9000

Information and contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: +44 845 080 9000.
BSI Assurance UK Limited, registered in England under number 7805321, at 389 Chiswick High Road, London, W4 4AL, UK.
A member of the BSI Group of Companies.