

Hughes 9502 BGAN M2M Terminal

Regulatory Compliance Certifications

Version 1.0

Hughes Network Systems
9605 Scranton Road, Suite 500
San Diego, CA 92121, USA

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Hughes Proprietary

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Revision History

Rev	Issue Date	Author	Scope
1.0	June 26, 2012	D. Couchman,	Issued

Open Issues

Issue No.	Issue	Disposition

1.0 INTRODUCTION

This document provides evidence of compliance with Safety, EMC and EMI, Regulatory standards for the Hughes 9502 BGAN M2M Terminal. All Regulatory testing has been performed by accredited Test Laboratories.

The Hughes 9502 BGAN M2M Terminal has been tested to comply with the following standards:

FCC Part 15	Radio Frequency Devices
FCC part 25	Satellite Communications
IC RSS-170	<i>Mobile Earth Stations and Ancillary Terrestrial Component Equipment Operating in the Mobile-Satellite Service Bands</i>
EN 301 444	<i>Satellite Earth Stations and Systems (SES); Harmonized EN for Land Mobile Earth Stations (LMES) Operating in the 1,5 GHz and 1,6 GHz Bands Providing Voice and/or Data Communications Covering Essential Requirements under Article 3.2 of the R&TTE Directive.</i>
EN 301 489-1, -20	<i>ElectroMagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services.</i>
EN 62311	<i>Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)</i>
IEC 60529	<i>Degrees of Protection Provided by Enclosures (IP Code)</i>
UL 60950-1 CAN/CSA-C22.2 No. 60950-1 IEC/EN 60950-1	<i>Information technology equipment. Safety. General requirements</i>
CB Certificate	<i>The CB Scheme certificate is an Internationally recognized Safety Test certificate accepted by over 50 countries, facilitating rapid approval in foreign markets.</i>
CE Marking	<i>The CE mark is a mandatory conformity mark for products placed on the market in the European Economic Area (EEA).</i>

2.0 MANUFACTURER'S DECLARATION OF CONFORMITY

We,	Hughes Network Systems
<i>(manufacturer's name)</i>	
of	9605 Scranton Road, Suite 500, San Diego, CA 92121, USA
<i>(address)</i>	
declare under our sole responsibility that the product	Hughes 9502 Satellite Terminal
<i>(detailed description of product including name, type, model and supplementary information such as lot, batch or serial number, sources and number of items)</i>	
to which this declaration relates, is in conformity with the following standards and/or other normative documents.	
<i>For article 3.1(a), Health and Safety of the User:</i>	
EN 62311	
IEC 60950-1 (2nd Edition)	
<i>For article 3.1(b), Electromagnetic Compatibility:</i>	
EN 301 489-1, EN 301 489-20	
<i>For article 3.2, Effective Use of the Spectrum Allocated:</i>	
EN 301 444	
We hereby declare that all essential radio test suites have been carried out and that the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.	
Identification mark:	The equipment will also carry the Class 2 equipment identifier:
The technical documentation relevant to the above equipment will be held at:	
Hughes Network Systems, 9605 Scranton Road, Suite 500, San Diego, CA 92121, USA	
<i>(name and address of EU representative)</i>	
Bill Lindsay	
<i>(name)</i>	
Senior Engineering Program Director	8 March 2012
<i>(title)</i>	
<i>(signature of authorized person)</i>	<i>(date)</i>

3.0 CERTIFICATE OF CONFORMITY



Certificate Of Conformity Electromagnetic Compatibility (EMC)

A sample of this product has been subject to assessment by Nemko, and is hereby confirmed to be in conformity with the applicable European EMC standards referred below. Sufficient evidence of conformity with Article 4 of the EMC Directive (89/336/EEC + 91/263/EEC + 92/32/EEC + 93/68/EEC + 93/97/EEC) has been provided.

Certificate No.: 802120

Order No.: 192228

Applicant	Hughes Network Systems, Inc. 9605 Scranton Road, Suite 500 San Diego, CA 92121 USA
Manufacturer	Hughes Network Systems, Inc. 9605 Scranton Road, Suite 500 San Diego, CA 92121 USA
Product	Machine-to-Machine (M2M) Terminal
Model	9502
Rating	12Vdc and 24 Vdc
Additional information	None
Brand Name	Hughes
Documentation	Test report 2012 01192288 ETSI Test report 2012 01192288 ETSIW Test report 2012 01192228 ETSI2
Standards applied	EN 301 489-1 v1.7.1 EN 301 489-20 v1.2.1 EN 301 444 v1.2.0 EN 62311:2008

www.nemko.com

This certificate is valid until	2012-02-13 + 4 years	<small>(provided that all signed certification conditions are complied with, and that possible changes to the product are notified to Nemko for acceptance prior to implementation)</small>
Nemko order number	192228	

This certificate authorizes the manufacturer to affix the below shown Nemko EMC Mark to each conforming product. And provided it is otherwise confirmed that the product also conforms with any other applicable Directives, the manufacturer (or the European authorized representative) may prepare an EC/EEA Declaration of Conformity and affix the below shown CE-marking to each conforming product.

Date of issue 2012-02-13

Certificate revision: 1.0



Name: Tom Tidwell [Nemko Group EMC Vericator]

Note: The certificate is no longer valid if any of the reference standards cease to exist or are replaced

4.0 CB SCHEME CERTIFICATE

	<p>Ref. Certif. No. NO67236</p>
<p>IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS DESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC</p>	
<p>CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC</p>	
<p>Product Produit</p> <p>Name and address of the applicant Nom et adresse du demandeur</p> <p>Name and address of the manufacturer Nom et adresse du fabricant</p> <p>Name and address of the factory Nom et adresse de l'usine</p> <p><small>Note: When more than one factory, please report on page 2 Note: Lorsque il y plus d'une usine, veuillez utiliser la deuxième page</small></p> <p>Ratings and principal characteristics Valeurs nominales et caractéristiques principales</p> <p>Trademark (if any) Marque de fabrique (si elle existe)</p> <p>Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur</p> <p>Model / Type Ref. Ref. De type</p> <p><small>Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire, peuvent être indiqués sur la deuxième page)</small></p> <p><small>A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la</small></p> <p><small>As shown in the Test Report Ref. No. which forms part of this Certificate Comme indiqué dans le Rapport de tests numéro de référence qui constitue partie de ce Certificat</small></p> <p>This CB Test Certificate is issued by the National Certification Body Ce Certificat de test OC est établi par l'Organisme National de Certification</p>	<p>Satellite Terminal</p> <p>Hughes Network Systems 9605 Scranton Road, Suite 500 San Diego, CA 92121 USA</p> <p>Hughes Network Systems 9605 Scranton Road, Suite 500 San Diego, CA 92121 USA</p> <p>Hughes Network Systems 16060 Industrial Drive Gaithersburg, MD 20877 USA</p> <p><input type="checkbox"/> Additional information on page 2</p> <p>1.5/0.75A, 12/24Vdc Cl. III</p> <p>9502</p> <p><input type="checkbox"/> Additional information on page 2</p> <p>IEC 60950-1(ed.2);am1</p> <p>198292</p>
<p>Gaustadalléen 30 NO-0373 Oslo, Norway</p> <p>Date: 30-01-2012</p>	<p>Signature: Hanne Yndestad Certification Department</p>

5.0 UL SAFETY CERTIFICATE

CERTIFICATE OF COMPLIANCE

Certificate Number 20120308 - E163228A32
Report Reference E163228 – 2012 February 02
Issue Date 2012 March 08
Issued to: HUGHES NETWORK SYSTEMS INC
11717 EXPLORATION LN
GERMANTOWN, MD 20876 USA

This is to certify that representative samples of Information Technology Equipment Including Electrical Business Equipment Satellite Terminal, Model 9502


Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: ANSI/UL 60950-1, "Information Technology Equipment - Safety - Part 1: General Requirements," and CAN/CSA-C22.2 No. 60950-1, "Information Technology Equipment - Safety - Part 1: General Requirements,"

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information.

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers:

 the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Cerny, Director, North American Certification Programs
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contact.



6.0 INDUSTRY CANADA RSS-170

		Nemko Canada Inc	
<i>Certificate of Conformity</i>		<i>Certificat de conformité</i>	
Certification Number/ Numéro de Certification	: 1232B-HN59502	Certificate Number/ Numéro de Certificat	: 1-03869
Issued to/ Délivré a	: Hughes Network Systems 9605 Scranton Rd, Suite 500 San Diego, CA, USA 92121		
Model Name/ Modèle	: 9502		
Type of Equipment/ Genre de matériel	: Mobile Earth Station		
Specifications/ Spécification	: RSS-170 Issue 2		
Test Laboratory/ Laboratoire d'essai	: Nemko USA, Inc. 2210 Faraday Avenue, Suite 150 Carlsbad, CA 92008 Phone (760) 444-3500 Fax (760) 444-3005		
Laboratory number/ Numéro de laboratoire	: 2040B		
Antenna Information/ Renseignements sur l'antenne	: External		
Frequency/Fréquences (MHz)	Power/Puissance (Watts)	Emission Designation/Genre d'émission	
1626.595 – 1660.2	3	25K0G7W	
1626.595 – 1660.2	3	50K0D7W	
1626.595 – 1660.2	3	50K0G7W	
1626.595 – 1660.2	3	100K0D7W	
1626.595 – 1660.2	3	100K0G7W	
1626.595 – 1660.2	3	200K0D7W	
1626.595 – 1660.2	3	200K0G7W	
<p><i>Certification of equipment means only that the equipment has met the requirements of the above-noted specification. Licence applications, where applicable to use certified equipment, are acted on accordingly by the Industry Canada issuing office and will depend on the existing radio environment, service and location of operation. This certificate is issued on condition that the holder complies and will continue to comply with the requirements and procedures issued by Industry Canada. The equipment for which this certificate is issued shall not be manufactured, imported, distributed, leased, offered for sale or sold unless the equipment complies with the applicable technical specifications and procedures issued by Industry Canada.</i></p> <p><i>La certification du matériel signifie seulement que le matériel a satisfait aux exigences de la norme indiquée ci-dessus. Les demandes de licences nécessaires pour l'utilisation du matériel certifié sont traitées en conséquence par le bureau de délivrance d'Industrie Canada et dépendent des conditions radio ambiantes, du service et de l'emplacement d'exploitation. Le présent certificat est délivré à la condition que le titulaire satisfasse et continue de satisfaire aux exigences et aux procédures d'Industrie Canada. Le matériel à l'égard duquel le présent certificat est délivré ne doit pas être fabriqué, importé, distribué, loué, mis en vente ou vendu à moins d'être conforme aux procédures et aux spécifications techniques applicables publiées par Industrie Canada.</i></p>			
<p>I hereby attest that the subject equipment was tested and found in compliance with the above-noted specification.</p> <p><i>Russell J. Grant</i> Senior Technical Assessor</p>		<p>J'atteste, par la présente, que le matériel a fait l'objet d'essai et a été jugé conforme à la spécification ci-dessus.</p> <p>Date: 14-Feb-12</p>	
<p>Nemko Canada Inc, 303 River Road, Ottawa, Ontario, K1V 1H2, Canada Tel: (613) 737 9680, Fax (613) 737 9691</p>			
<p>Cert-001 Issue 5</p>			
<p><i>The certification system, as described in ISO/IEC Guide 67 (Conformity Assessment – Fundamentals of Product Certification), most closely resembles System 1.</i></p>			

7.0 IEC 60529 INGRESS PROTECTION



Product Service

Technical Report No. 095-1200441-000, Revision 00

Issue Date: 2012-01-12

Client / Applicant:	Hughes Network Systems 9605 Scranton Rd. Suite 500 San Diego CA. 92121 Attn.: Alfred Ebrahim T: 858-452-4634	E: Alfred.Ebrahim@hughes.com F: 301-428-1669
Responsible Manufacturer:	Same as applicant	
Manufacturing location(s):	Hughes Network Systems 9605 Scranton Rd. Suite 500 San Diego CA. 92121	
Test subject:	Product: Hughes 9502 Type: Terminal and Satellite Antenna	
Test specifications:	IEC 60529:2001 Ed. 2.1	
Purpose of examination:	Test of the Terminal and Satellite Antenna and its function against ingress of water, protected against access to hazardous parts with a tool and exposure to dust per IEC 60529. Evaluation in accordance with the test specifications of IP65 and IP40. No dielectric strength tests required	
Test result:	The equipment submitted MEETS the requirements of the test specifications as indicated.	

This technical report may only be quoted in full. Any use for advertising purposes must be granted in writing. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.

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Technical Report No. 095-1200441-000
Revision: 00
Project Manager: Justina Sanchez
Date: 2012-01-12
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