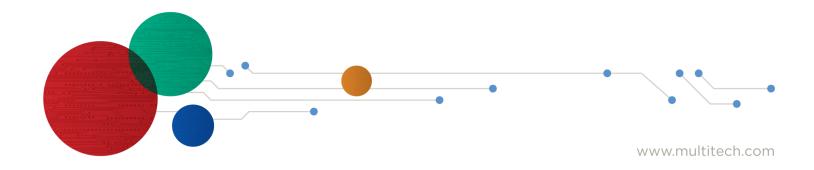# MultiConnect® Conduit™

H5 and No Radio Regulatory Information

MTCDT Conduit Regulatory Information

Models: MTCDT-H5-246L, MTCDT-H5-246A, MTCDT-247L, MTCDT-247A

Part Number: S000624, Version 3.2

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Contacting MultiTech

Knowledge Base

The Knowledge Base provides immediate access to support information and resolutions for all MultiTech products. Visit http://www.multitech.com/kb.go.

Support Portal

To create an account and submit a support case directly to our technical support team, visit: https://support.multitech.com.

Support

Business Hours: M-F, 8am to 5pm CT

Country	By Email	By Phone
Europe, Middle East, Africa:	support@multitech.co.uk	+(44) 118 959 7774
U.S., Canada, all others:	support@multitech.com	(800) 972-2439 or (763) 717-5863

Warranty

To read the warranty statement for your product, visit www.multitech.com/warranty.go. For other warranty options, visit www.multitech.com/es.go.

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Contents

Chapter 1 – Document Info and Radio Specifications

About this Document

This document contains regulatory, environmental, and safety notices only for the following Conduit models. Accessory cards may have additional and separate regulatory content.

- MTCDT-246/7L-US-EU-GB
- MTCDT-246/7A-US-EU-GB

- MTCDT-H5-246/7L-US-EU-GB
- MTCDT-H5-246/7A-US-EU-GB

Operational Description

The MultiConnect® Conduit™ (MTCDT) is a programmable gateway that uses an open Linux development environment to enable machine-to-machine (M2M) connectivity using various wireless interfaces. The MTCDT-H5-868 is an HSPA+ / LoRa IoT Gateway. It also provides an online application store as a platform for developers to provision and manage their gateway and associated sensors and devices.

Frequency Bands

Cellular Radio	Frequencies
HE910-D H5	GSM 850/900, DCS 1800, PCS 1900, WCDMA/FDD 800/850/900, AWS 1700/1900/2100

HE910 Telit Transmission Output Power

Band	Power Class
GSM 850/900 MHz	4 (2W)
DCS 1800, PCS 1900 MHz	1 (1W)
EDGE, 850/900 MHz	E2 (0.557W)
EDGE, 1800/1900 MHz	Class E2 (0.4W)
WCDMA 850/900, AWS 1700, 1900/2100 MHz	Class 3 (0.25W)

LoRa Transmission Output Power

868 Models

Max output 25 dBm

Power	Frequency	On Power-up (dBm)	18 Hours After Power-up (dBm)	Bandwidth
27	869.525 MHz	24.18	25	125 kHz
27	869.525 MHz	24.18	24.83	250 kHz

915 Models

Max output 27 dBm

Power	Frequency	On Power-up (dBm)	18 Hours After Power-up (dBm)	Bandwidth
26	923.3 MHz	26.58	25.88	500 kHz
26	925.1 MHz	26.76	26.34	500 kHz
26	927.5 MHz	27.22	26.8	500 kHz

Chapter 2 – Regulatory Information

47 CFR Part 15 Regulation Class B Devices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Notice

The MultiTech Conduit is an open embedded development product. Configurations of this product may optionally contain a sub GHz radio technology which MultiTech has certified for compliance with US and Foreign compliance bodies including FCC, R&TTE and others. (e.g. FCC 15.247:2015 & IC RSS-210:2010).

MTDOT-x products are open development based products that contain a sub ghz radio technology. MultiTech has certified for compliance with US and Foreign compliance bodies including FCC, R&TTE and others. (e.g. FCC 15.247:2015 & IC RSS-210:2010)

The MTAC-LORA is open development based product that contains a sub ghz radio technology. MultiTech has certified for compliance with US and Foreign compliance bodies including FCC, R&TTE and others. (e.g. FCC 15.247:2015 & IC RSS-210:2010)

xDot products are open development based products that contain a sub ghz radio technology. MultiTech has certified for compliance with US and Foreign compliance bodies including FCC, R&TTE and others. (e.g. FCC 15.247:2015 & IC RSS 247:2015)

MultiTech provides software code meant to operate the radio to a level that maintains compliance with the operating modes under which these radio devices were certified. To ensure this level of compliance, the software code is provided in binary form only. Users are prohibited from making any changes that affect the operation of the radio performance. Accessing or controlling the radio through any means other than the provided binary software will require the user to obtain their own intentional radiator license from the certification body governing their locality, as all pre-certification provided with Conduit mDot MTAC-LORA xDot will have been made invalid.

FCC Certification

FCC Part 15

FCC Identifier:	RI7HE910

Equipment Class:	Part 15 Class Computing Device Peripheral
Notes:	WWAN Module
FCC Rule Parts:	15B
Approval:	Single Modular

FCC Parts 22, 24, and 27 (-H5 Models Only)

FCC Identifier:	RI7HE910
Equipment Class:	PCS Licensed Transmitter
Notes:	WWAN Module
Approval:	Single Modular

FCC Rule Parts	Frequency Range (MHz)	Output Watts	Frequency Tolerance	Emission Designators
22H	824.2 - 824.2	1.995	1.0 PM	300KGXW
22H	824.2-848.8	0.997	1.0 PM	300KG7W
22H	826.4 - 846.4	0.446	1.0 PM	4M20F9W
27	1712.4 - 1752.6	0.226	1.0 PM	4M20F9W
24E	1850.2 - 1909.8	0.993	1.0 PM	300KGXW
24E	1850.2 - 1909.8	0.380	1.0 PM	300KG7W
24E	1852.4 - 1907.6	0.243	1.0 PM	4M20F9W

Power listed is conducted. The maximum antenna gain including cable loss for compliance with radiated power limits, RF exposure requirements and the categorical exclusion requirements of 2.1091 is 5.22 dBi for part 22H, 3.31 dBi for part 24E and 6.45 dBi for part 27. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operated in conjunction with any antenna or transmitter not described under this FCC id, except in accordance with FCC multi-transmitter product procedures. If you co-locate the device with the MTAC-LORA-915 card then the separation must be 23 cm or greater. The final product operating with this transmitter must include operating instructions and antenna installation instructions, for end-users and installers to satisfy RF exposure compliance requirements. Compliance of this device in all final product configurations is the responsibility of the Grantee. Installation of this device into specific final products may require the submission of a Class II permissive change application containing data pertinent to RF Exposure, spurious emissions, ERP/EIRP, and host/module authentication, or new application if appropriate.

This device contains GSM functions that are not operational in the U.S. Territories. This filing is only applicable for U.S. operations.

FCC Interference Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

Industry Canada Class B Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Reglement Canadien sur le matériel brouilleur.

This device complies with Industry Canada license-exempt RSS standard(s). The operation is permitted for the following two conditions:

1. the device may not cause interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et
2. l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Industry Canada Certificate (-H5 Models Only)

Certification Number/No. de Certification	5131A-HE910
Type of Radio Equipment/Genre de Matériel	Advanced Wireless Services Equipment/Matériel des services sans fil évolués (1710-1755 MHz and 2110-2155 MHz)
	Cellular Mobile GSM/ Téléphone cellulaire mobile GSM (824-849 MHZ)
	Modular Approval/Approbation modulaire (1850-1910 MHz)
Model/Modèle	HE910

Specification/ Cahier des Charges	Issue/ Édition	From Frequency/ De Fréquences	To Frequency/ Á Fréquences	Emmission Designation/ Designation D'émission	Minimum Power	Maximum Power
RSS133	5.0	1.85 G	1.91 G	241KGXW	993 mW	993 mW
RSS133	650	1.852 G	1.908 G	4M09F9W	243 mW	243 mW
RSS132	2.0	824.2 M	848.8 M	248KG7W	997 mW	997 mW
RSS139	2.0	1.712 G	1.753 G	4M06F9W	226 mW	226 W
RSS133	5.0	1.85 G	1.91 G	252KG7W	380 mW	380 mW
RSS132	2.0	826.4 M	846.4 M	4M07F9W	446 mW	446 mW
RSS132	2.0	824.8 M	848.8 M	40KGXW	1.995 mW	1.995 mW

Certification of equipment means only that the equipment has met the requirements of the above noted specification. License 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.

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 applicable publiées par Industrie Canada.

EMC, Safety, and Radio Equipment Directive (RED) Compliance

C E

The CE mark is affixed to this product to confirm compliance with the following European Community Directives:

> Council Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment;
> and
> Council Directive 2014/53/EU on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

MultiTech declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The declaration of conformity may be requested at https://support.multitech.com.

Chapter 3 – Safety Notices

Lithium Battery

- A lithium battery (3V, coin cell, CR1632) located within the product provides backup power for the timekeeping. This battery has an estimated life expectancy of ten years.

- When this battery starts to weaken, the date and time may be incorrect.

- Battery is not user replaceable. If the battery fails, the device must be sent back to MultiTech Systems for battery replacement.

- Lithium cells and batteries are subject to the Provisions for International Transportation. Multi-Tech Systems, Inc. confirms that the Lithium batteries used in the MultiTech product(s) referenced in this manual comply with Special Provision 188 of the UN Model Regulations, Special Provision A45 of the ICAO-TI/IATA-DGR (Air), Special Provision 310 of the IMDG Code, and Special Provision 188 of the ADR and RID (Road and Rail Europe).

CAUTION: Risk of explosion if this battery is replaced by an incorrect type. Dispose of batteries according to instructions.
Attention: Risque d'explosion si vous remplacez la batterie par un modèle incompatible. Jetez les piles usagées selon les instructions.

User Responsibility

Respect all local regulations for operating your wireless device. Use the security features to block unauthorized use and theft.

Power Supply Caution

CAUTION: Do not replace the power supply with one designed for another product; doing so can damage the modem and void your warranty. Adapter shall be installed near the equipment and shall be easily accessible.
CAUTION: Pour garantir une protection continue contre les risques d'incendie, remplacez les fusibles uniquement par des fusibles du même type et du même calibre. L'adaptateur doit être installé à proximité de l'appareil et doit être facilement accessible.

Device Maintenance

When maintaining your device:

- Do not attempt to disassemble the device. There are no user serviceable parts inside.

- Do not misuse the device. Follow instructions on proper operation and only use as intended. Misuse could make the device inoperable, damage the device and/or other equipment, or harm users.

- Do not apply excessive pressure or place unnecessary weight on the device. This could result in damage to the device or harm to users .

- Do not use this device in explosive or hazardous environments unless the model is specifically approved for such use. The device may cause sparks. Sparks in explosive areas could cause explosion or fire and may result in property damage, severe injury, and/or death.

- Do not expose your device to any extreme environment where the temperature or humidity is high. Such exposure could result in damage to the device or fire.

- Do not expose the device to water, rain, or spilled beverages. It is not waterproof. Exposure to liquids could result in damage to the device.

- Do not place the device alongside computer discs, credit or travel cards, or other magnetic media. The information contained on discs or cards may be affected by the device.

- Using accessories, such as antennas, that MultiTech has not authorized or that are not compliant with MultiTech's accessory specifications may invalidate the warranty.

If the device is not working properly, contact MultiTech Technical Support.

Vehicle Safety

When using your device in a vehicle:

- Do not use this device while driving.

- Respect national regulations on the use of cellular devices in vehicles.

- If incorrectly installed in a vehicle, operating the wireless device could interfere with the vehicle's electronics. To avoid such problems, use qualified personnel to install the device. The installer should verify the vehicle electronics are protected from interference.

- Using an alert device to operate a vehicle's lights or horn is not permitted on public roads.

- UL evaluated this device for use in ordinary locations only. UL did NOT evaluate this device for installation in a vehicle or other outdoor locations. UL Certification does not apply or extend to use in vehicles or outdoor applications.

Notice regarding Compliance with FCC, EU, and Industry Canada Requirements for RF Exposure

The antenna intended for use with this unit meets the requirements for mobile operating configurations and for fixed mounted operations, as defined in 2.1091 of the FCC rules for satisfying RF exposure compliance. This device also meets the European RF exposure requirements of EN 62311. If an alternate antenna is used, consult user documentation for required antenna specifications.

Compliance of the device with the FCC, EU and IC rules regarding RF Exposure was established and is given with the maximum antenna gain as specified above for a minimum distance of 20 cm between the devices radiating structures (the antenna) and the body of users. Qualification for distances closer than 20 cm (portable operation) would require re-certification.

Wireless devices could generate radiation. Other nearby electronic devices, like microwave ovens, may also generate additional radiation to the user causing a higher level of RF exposure.

Radio Frequency (RF) Safety

Due to the possibility of radio frequency (RF) interference, it is important that you follow any special regulations regarding the use of radio equipment. Follow the safety advice given below.

- Operating your device close to other electronic equipment may cause interference if the equipment is inadequately protected. Observe any warning signs and manufacturers' recommendations.

- Different industries and businesses restrict the use of cellular devices. Respect restrictions on the use of radio equipment in fuel depots, chemical plants, or where blasting operations are in process. Follow restrictions for any environment where you operate the device.

- Do not place the antenna outdoors.
- Switch OFF your wireless device when in an aircraft. Using portable electronic devices in an aircraft may endanger aircraft operation, disrupt the cellular network, and is illegal. Failing to observe this restriction may lead to suspension or denial of cellular services to the offender, legal action, or both.
- Switch OFF your wireless device when around gasoline or diesel-fuel pumps and before filling your vehicle with fuel.
- Switch OFF your wireless device in hospitals and any other place where medical equipment may be in use.

Sécurité relative aux appareils à radiofréquence (RF)

À cause du risque d'interférences de radiofréquence (RF), il est important de respecter toutes les réglementations spéciales relatives aux équipements radio. Suivez les conseils de sécurité ci-dessous.

- Utiliser l'appareil à proximité d'autres équipements électroniques peut causer des interférences si les équipements ne sont pas bien protégés. Respectez tous les panneaux d'avertissement et les recommandations du fabricant.
- Certains secteurs industriels et certaines entreprises limitent l'utilisation des appareils cellulaires. Respectez ces restrictions relatives aux équipements radio dans les dépôts de carburant, dans les usines de produits chimiques, ou dans les zones où des dynamitages sont en cours. Suivez les restrictions relatives à chaque type d'environnement où vous utiliserez l'appareil.
- Ne placez pas l'antenne en extérieur.
- Éteignez votre appareil sans fil dans les avions. L'utilisation d'appareils électroniques portables en avion est illégale: elle peut fortement perturber le fonctionnement de l'appareil et désactiver le réseau cellulaire. S'il ne respecte pas cette consigne, le responsable peut voir son accès aux services cellulaires suspendu ou interdit, peut être poursuivi en justice, ou les deux.
- Éteignez votre appareil sans fil à proximité des pompes à essence ou de diesel avant de remplir le réservoir de votre véhicule de carburant.
- Éteignez votre appareil sans fil dans les hôpitaux ou dans toutes les zones où des appareils médicaux sont susceptibles d'être utilisés.

Interference with Pacemakers and Other Medical Devices

Potential interference

Radio frequency energy (RF) from cellular devices can interact with some electronic devices. This is electromagnetic interference (EMI). The FDA helped develop a detailed test method to measure EMI of implanted cardiac pacemakers and defibrillators from cellular devices. This test method is part of the Association for the Advancement of Medical Instrumentation (AAMI) standard. This standard allows manufacturers to ensure that cardiac pacemakers and defibrillators are safe from cellular device EMI.

The FDA continues to monitor cellular devices for interactions with other medical devices. If harmful interference occurs, the FDA will assess the interference and work to resolve the problem.

Precautions for pacemaker wearers

If EMI occurs, it could affect a pacemaker in one of three ways:

- Stop the pacemaker from delivering the stimulating pulses that regulate the heart's rhythm.
- Cause the pacemaker to deliver the pulses irregularly.

- Cause the pacemaker to ignore the heart's own rhythm and deliver pulses at a fixed rate.

Based on current research, cellular devices do not pose a significant health problem for most pacemaker wearers. However, people with pacemakers may want to take simple precautions to be sure that their device doesn't cause a problem.

- Keep the device on the opposite side of the body from the pacemaker to add extra distance between the pacemaker and the device.
- Avoid placing a turned-on device next to the pacemaker (for example, don't carry the device in a shirt or jacket pocket directly over the pacemaker).

Chapter 4 – Environmental Notices

Waste Electrical and Electronic Equipment Statement

Note: This statement may be used in documentation for your final product applications.

WEEE Directive

The WEEE Directive places an obligation on EU-based manufacturers, distributors, retailers, and importers to take-back electronics products at the end of their useful life. A sister directive, ROHS (Restriction of Hazardous Substances) complements the WEEE Directive by banning the presence of specific hazardous substances in the products at the design phase. The WEEE Directive covers all MultiTech products imported into the EU as of August 13, 2005. EU-based manufacturers, distributors, retailers and importers are obliged to finance the costs of recovery from municipal collection points, reuse, and recycling of specified percentages per the WEEE requirements.

Instructions for Disposal of WEEE by Users in the European Union

The symbol shown below is on the product or on its packaging, which indicates that this product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

July, 2005

Restriction of the Use of Hazardous Substances (RoHS)

Multi-Tech Systems, Inc.

Certificate of Compliance

2011/65/EU

Multi-Tech Systems, Inc. confirms that its embedded products comply with the chemical concentration limitations set forth in the directive 2011/65/EU of the European Parliament (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment - RoHS).

These MultiTech products do not contain the following banned chemicals[1]:

- Lead, [Pb] < 1000 PPM
- Mercury, [Hg] < 1000 PPM

- Hexavalent Chromium, [Cr+6] < 1000 PPM

- Cadmium, [Cd] < 100 PPM

- Polybrominated Biphenyl, [PBB] < 1000 PPM

- Polybrominated Diphenyl Ether, [PBDE] < 1000 PPM

Environmental considerations:

- Moisture Sensitivity Level (MSL) =1

- Maximum Soldering temperature = 260C (in SMT reflow oven)

[1]Lead usage in some components is exempted by the following RoHS annex, therefore higher lead concentration would be found in some modules (>1000 PPM);

- Resistors containing lead in a glass or ceramic matrix compound.

REACH Statement

Registration of Substances

After careful review of the legislation and specifically the definition of an "article" as defined in EC Regulation 1907/2006, Title II, Chapter 1, Article 7.1(a)(b), it is our current view that Multi-Tech Systems, Inc. products would be considered as "articles." In light of the definition in § 7.1(b) which requires registration of an article only if it contains a regulated substance that "is intended to be released under normal or reasonably foreseeable conditions of use," our analysis is that Multi-Tech Systems, Inc. products constitute nonregisterable articles for their intended and anticipated use.

Substances of Very High Concern (SVHC)

Per the candidate list of Substances of Very High Concern (SVHC) published October 28, 2008 we have reviewed these substances and certify the Multi-Tech Systems, Inc. products are compliant per the EU "REACH" requirements of less than 0.1% (w/w) for each substance. If new SVHC candidates are published by the European Chemicals Agency, and relevant substances have been confirmed to be greater than 0.1% (w/w), Multi-Tech Systems, Inc. will provide updated compliance status.

Multi-Tech Systems, Inc. also declares it has been duly diligent in ensuring that the products supplied are compliant through a formalized process which includes collection and validation of materials declarations and selective materials analysis where appropriate. This data is controlled as part of a formal quality system and will be made available upon request.

Information on HS/TS Substances According to Chinese Standards (in Chinese)

依照中国标准的有毒有害物质信息

根据中华人民共和国信息产业部 (MII) 制定的电子信息产品 (EIP) 标准－中华人民共和国《电子信息产品污染控制管理办法》（第 39 号），也称作中国 RoHS, 下表列出了 Multi-Tech Systems, Inc. 产品中可能含有的有毒物质 (TS) 或有害物质 (HS) 的名称及含量水平方面的信息。

有害/有毒物质/元素

成分名称	铅 (PB)	汞 (Hg)	镉 (CD)	六价铬 (CR6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板	O	O	O	O	O	O
电阻器	X	O	O	O	O	O
电容器	X	O	O	O	O	O
铁氧体磁环	O	O	O	O	O	O
继电器/光学部件	O	O	O	O	O	O
ICs	O	O	O	O	O	O
二极管/晶体管	O	O	O	O	O	O
振荡器和晶振	X	O	O	O	O	O
调节器	O	O	O	O	O	O
电压传感器	O	O	O	O	O	O
变压器	O	O	O	O	O	O
扬声器	O	O	O	O	O	O
连接器	O	O	O	O	O	O
LEDs	O	O	O	O	O	O
螺丝、螺母以及其它五金件	X	O	O	O	O	O
交流-直流电源	O	O	O	O	O	O
软件/文档 CD	O	O	O	O	O	O
手册和纸页	O	O	O	O	O	O
底盘	O	O	O	O	O	O

X 表示所有使用类似材料的设备中有害/有毒物质的含量水平高于 SJ/Txxx-2006 限量要求。
O 表示不含该物质或者该物质的含量水平在上述限量要求之内。

Information on HS/TS Substances According to Chinese Standards

In accordance with China's Administrative Measures on the Control of Pollution Caused by Electronic Information Products (EIP) # 39, also known as China RoHS, the following information is provided regarding the names and concentration levels of Toxic Substances (TS) or Hazardous Substances (HS) which may be contained in Multi-Tech Systems Inc. products relative to the EIP standards set by China's Ministry of Information Industry (MII).

Hazardous/Toxic Substance/Elements

Name of the Component	Lead (PB)	Mercury (Hg)	Cadmium (CD)	Hexavalent Chromium (CR6+)	Polybrominated Biphenyl (PBB)	Polybrominated Diphenyl Ether (PBDE)
Printed Circuit Boards	O	O	O	O	O	O
Resistors	X	O	O	O	O	O
Capacitors	X	O	O	O	O	O
Ferrite Beads	O	O	O	O	O	O
Relays/Opticals	O	O	O	O	O	O
ICs	O	O	O	O	O	O
Diodes/ Transistors	O	O	O	O	O	O
Oscillators and Crystals	X	O	O	O	O	O
Regulator	O	O	O	O	O	O
Voltage Sensor	O	O	O	O	O	O
Transformer	O	O	O	O	O	O
Speaker	O	O	O	O	O	O
Connectors	O	O	O	O	O	O
LEDs	O	O	O	O	O	O
Screws, Nuts, and other Hardware	X	O	O	O	O	O
AC-DC Power Supplies	O	O	O	O	O	O
Software /Documentation CDs	O	O	O	O	O	O
Booklets and Paperwork	O	O	O	O	O	O
Chassis	O	O	O	O	O	O

X Represents that the concentration of such hazardous/toxic substance in all the units of homogeneous material of such component is higher than the SJ/Txxx-2006 Requirements for Concentration Limits.
O Represents that no such substances are used or that the concentration is within the aforementioned limits.