WebDAQ 504
SAFETY, ENVIRONMENTAL, AND REGULATORY INFORMATION

The guidelines in this document are specific to the WebDAQ 504

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Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Icons

Notice   Take precautions to avoid data loss, loss of signal integrity, degradation of performance, or damage to the device.

Caution   Take precautions to avoid injury. Consult the device documentation for cautionary statements when you see this icon printed on the device.

Safety Guidelines

Caution   Observe all instructions and cautions in the user documentation. Using the device in the manner not specified can damage the device and compromise the built-in safety protection.

Attention   Suivez toutes les instructions et respectez toutes les mises en garde de la documentation utilisateur. L'utilisation d'un modèle de toute autre façon que celle spécifiée risque de l'endommager et de compromettre la protection de sécurité intégrée. Renvoyez les modèles endommagés à NI pourréparation.

Caution   Fire, explosion, and severe burn hazard. This device contains a replaceable lithium battery. Do not insert improperly, recharge or disassemble the battery. Do not heat the battery or the device above 100 °C. Do not incinerate the battery or the device. Do not expose the battery contents to water. Take precautions to ensure correct polarity of the battery in the device.

Caution   Risque d'incendie, d'explosion et de brûlures graves. Cet appareil contient une pile au lithium remplaçable. Insérer la pile correctement. Nepas recharger ou démonter la pile. Ne pas chauffer la pile ou l'appareil à une température supérieure à 100 °C. Ne pas incinérer la pile ou l'appareil. Éviter tout contact du contenu de la pile avec de l'eau. Prenez des précautions pour vous assurer que la polarité de la batterie dans l'appareil est correcte

Caution   The device is designed for non-hazardous live signals. You must ensure that all signals connected to the device are isolated from hazardous live circuits and no unsafe voltages are present at the device inputs. Voltages that exceed the specifications could result in damage to the device.

Caution   L'appareil est conçu pour les signaux en direct non dangereux. Vous devez vous assurer que tous les signaux connectés à l'appareil sont isolés des circuits dangereux sous tension et qu'aucune tension dangereuse n'est présente à ses entrées. Des tensions supérieures à celles mentionnées dans les spécifications peuvent endommager l'appareil.

Caution   Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

⚠ **Caution** Risque d'explosion si la pile est remplacée par un type de pile incorrect. Reportez-vous à la documentation de l'appareil sur ni.com/manuals pour obtenir des informations sur le remplacement, l'élimination et le recyclage de sa pile.

Safety Voltages

Connect only voltages that are within these limits.

Voltage limits

       Channel-to-earth ground..±30 V max, CAT I

Isolation...

       Channel-to-channel..None

       Channel-to-earth ground..None

📝 **Note** The I/O terminals are functionally isolated from chassis ground to prevent ground loops, but do not meet IEC 61010-1 for safety isolation.

Measurement Category I is for measurements performed on circuits not directly connected to the electrical distribution system referred to as *MAINS* voltage. MAINS is a hazardous live electrical supply system that powers equipment. This category is for measurements of voltages from specially protected secondary circuits. Such voltage measurements include signal levels, special equipment, limited-energy parts of equipment, circuits powered by regulated low-voltage sources, and electronics.

📝 **Note** Measurement Categories CAT I and CAT O are equivalent. These test and measurement circuits are for other circuits not intended for direct connection to the MAINS building installations of Measurement Categories CAT II, CAT III, or CAT IV.

⚠ **Caution** Do *not* connect the WebDAQ 504 to signals or use for measurements within Measurement Categories II, III or IV

⚠ **Caution** Ne connectez pas le WebDAQ 504 à des signaux et ne l'utilisez pas pour effectuer des mesures dans les catégories de mesure II, III ou IV.

Electrical

Voltage measurement range......................................±5 V

Safety Compliance Standards

This product meets the requirements of the following standards of safety for electrical equipment for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA C22.2 No. 61010-1

📝 **Note** For UL and other safety certifications, refer to the product label or the Product Certifications and Declarations section.

Electromagnetic and Radio Equipment Compatibility Guidelines

This device was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC) as stated in the device specifications. These requirements and limits provide reasonable protection against harmful interference when the device is operated in its intended operational electromagnetic environment.

This device is intended for use in controlled Electromagnetic locations. However, harmful interference may occur in some installations, when the product is connected to a peripheral device or test object, or if the product is used in residential, commercial, industrial, or EM uncontrolled areas. To minimize interference with radio and television reception and prevent unacceptable performance degradation, install and use this product in strict accordance with the instructions in the product documentation.

Furthermore, any modifications to the device not expressly approved by Digilent could void your authority to operate it under your local regulatory rules.

EMC Notices

(!) **Notice** For EMC declarations and certifications, and additional information, refer to the Declaration of Conformity (DoC) on our website at *Calibration Certificates*.

(!) **Notice** Changes or modifications to the device not expressly approved by Digilent could void your authority to operate the device under your local regulatory rules.

(!) **Notice** The performance of this product can be disrupted if subjected to Electrostatic Discharge (ESD) during operation. To prevent damage, industry-standard ESD prevention measures must be employed during installation, maintenance, and operation.

(!) **Notice** Shielded cables are required in order to meet the stated EMC specifications.

(!) **Notice** The length of all I/O cables must be no longer than 3 m (10 ft).

Electromagnetic Compatibility Standards

This product meets the requirements of the following EMC standards for electrical equipment for measurement, control, and laboratory use:

- EN 61326-1 (IEC 61326-1): Class A emissions; Controlled immunity
- EN 55011 (CISPR 11): Group 1, Class A emissions

Environmental Guidelines

(!) **Notice** This device is not intended for use in outdoor or hazardous locations.

Environmental Characteristics

Temperature

   Operating ....0 °C to 50 °C

Storage ....–40 °C to 85 °C

Humidity

Operating ....10% to 90%, noncondensing
Storage...5% to 95% RH, noncondensing

Ingress Protection...IP30

Pollution Degree 2

Maximum Altitude..2,000 m (6,562 ft)

Indoor use only.

Environmental Management

Digilent is committed to designing and manufacturing products in an environmentally responsible manner. Digilent recognizes that eliminating certain hazardous substances from our products is beneficial to the environment and to Digilent customers.

Waste Electrical and Electronic Equipment (WEEE)

EU Customers   At the end of the device life cycle, all Digilent devices must be disposed of according to local laws and regulations.

电子信息产品污染控制管理办法（中国 RoHS)

中国客户 Digilent符合中国电子信息产品中限制使用某些有害物质指令(RoHS)。关于 Digilent 中国 RoHS 合规性信息，请登录*ni.com/environment/rohs_china*。(For information about China RoHS compliance, go to *ni.com/environment/rohs_china*)

Battery Recycling

The model contains a user-replaceable battery. Products containing lithium must be disposed of or recycled in accordance with all local laws and site regulations. For more information about disposing of or recycling this device's battery, refer to *https://www.panasonic-batteries.com/*.

Power Requirements

The WebDAQ 504 is powered by an external adapter.

Input voltage...6 VDC to 16 VDC, center positive

Input wattage ....4 W typ, 10 W max

External power adapter ....Adapter Technology ATS018T-W090V 18W adapter included.

....9 V, 2.2 A, 110 VAC to 240 VAC input range required.

Power behavior...W1 jumper installed (factory default): Soft power on using the momentary power button; device can turn its power off to shut down. Device does not resume operation if power is lost.

....W1 jumper removed: Device is always on if power is applied. Power button functions only as a reboot button.

Battery ....One 3 V button cell lithium battery required to maintain time of day clock when device is powered off.

Battery replacement: ....Panasonic BR-1225 3V lithium coin cell battery (755203-01); user-replaceable.

📋 **Note**   Refer to the WebDAQ 504 User's Guide stored on the device for the location of the W1 jumper or the battery replacement procedure. This document is also available on our website at *digilent.com*.

Physical Characteristics

Dimensions (L × W × H) ....158.8 × 146.1 × 38.1 mm (6.25 × 5.75 × 1.50 in.)
....178.8 × 146.1 × 38.1 mm (7.04 × 5.75 × 1.50 in.) includes BNC connectors.

Weight ....680 g (1.50 lb)

Maintenance

If you need to clean your device, wipe it with a dry towel.

Export Compliance

This device is subject to control under the U.S. Export Administration Regulations (15 CFR Part 730 et. seq.) administered by the U.S. Department of Commerce's Bureau of industry and Security (BIS) (*www.bis.doc.gov*) and other applicable U.S. export controls laws and sanctions regulations. This device may also be subject to additional license requirements of other countries' regulations.

Additionally, this device may also require export licensing before being returned to Digilent. The issuance of a Return Material Authorization (RMA) # by Digilent does not constitute export authorization. The user must comply with all applicable export laws prior to exporting or re-exporting this device. See *digilent.com/legal* for more information and to request relevant import classification codes (such as HTS), export classification codes (such as ECCN), and other import/export data.

CE Compliance C€

This product meets the essential requirements of applicable European Directives as follows:

- 2014/30/EU; Electromagnetic Compatibility Directive (EMC)
- 2011/65/EU; Restriction of Hazardous Substances (RoHS)

Product Certifications and Declarations

Hereby, Digilent declares that the WebDAQ 504 is in compliance with the essential requirements and other relevant provisions of Directive 2014/30/EU, Directive 2011/65/EU, and Directive (EU) 2015/863. Refer to the product Declaration of Conformity (DoC) on our website at *digilent.com* for additional regulatory compliance information.

Additional Resources

Refer to the WebDAQ 504 User's Guide for more information about your device, including specifications, signal pinouts, and instructions for configuring your device. This document is stored on the device and also available on our website at *digilent.com*.

Worldwide Support and Services

The Digilent website is your complete resource for technical support. At the *Digilent Forum*, you have access to application development self-help resources to email and phone assistance from Digilent Application Engineers. For international customers, visit the International Distributors section of *digilent.com* for your local distributor contact information.