

Agency Listings and Approvals for Tridium Hardware Products

Overview

NOTE: This document is subject to frequent change. For the latest update, see [Agency Listings and Approvals for Tridium Hardware Products](#) on the Niagara-Central website.

The agency listings and approvals provided are for Tridium controllers (JACEs). Modules and option cards may be listed as part of the equipment tested in some of the controller *CE Declaration of Conformity* statements. The index includes module and option card entries that point to the controller with which each was tested.

DISCLAIMER: It is not possible to test every permutation and, in some cases, an accessory (IO, power supply, or option card) may be tested with only one version of the JACE. Tridium tries to get every accessory on at least one report, but this document may not reference every module or option.

The source MS Word file used to create this document is available upon request.

Change Log

- December 12, 2018: Added EDGE 10 compliance details.
- November 26, 2018: Replaced EN61000-3-2:2006+A1/A2:2009 with EN61000-3-2:2014 for JACE-8000 [CE compliance](#).
- October 12, 2018: Removed FCC Subpart C and Subpart E mention from IO-R-16 and IO-R-34 page.
- March 6, 2018: Edited DOC for JACE-8000 to include RED directive testing results.
- September 21, 2017: Added section for IO-R-16 an IO-R-34. Removed individual product DoC signatures and added single DoC signature page.
- December 2, 2016: Removed “C-Tick” under JACE-8000 section.
- April 19, 2016: Updated EMC Directive dates to reflect latest product testing, edited and reformatted manufacturer information, OEM partners reference, and signature blocks.
- March 17, 2016: Added applicable standards for: T-700, T-600/600E, and T-200. Added NPB-GPRS with applicable tables of Directives and Standards. Added IO-16-485 with applicable listings. Created a section for Option Cards and added NPB-2X-REDLINK with appropriate listings. Updated and added C-Tick/RCM compliance statement to applicable items.
- February 15, 2016: Added CE DoC details for JACE-8000 and related option modules.
- December 21, 2015: Replaced “T-8000” with “JACE-8000” wherever it occurs in the document.
- December 14, 2015: Added FCC and Industry Canada compliance information to JACE-8000 section.
- December 7, 2015: Added new section for inclusion of all JACE-8000 listings and approvals.
- September 16, 2014: Updated RoHS (Restriction of Hazardous Substances) Compliance to RoHS 2 (RoHS Directive 2011/65/EC). All controller CE Declaration of Conformity statements were also updated with a related added entry.
- March 18, 2014: Added UL information for the T-200, T-600/T-600E and T-700 products. In the CE Declaration of Conformity for the T-200 and T-600, noted a ferrite was used with the NPB-PWR-UN. An ending BTL (BACnet Testing Laboratories) Certification section was added.
- February 26, 2014: A CE Declaration of Conformity statement was added for T-603/645 controllers. Corrections to the CE Declaration of Conformity statements for controllers T-200, T-300E, T-600/600E and T-700. A RoHS (Restriction of Hazardous Substances) Compliance section was added to clarify RoHS compliance for controller option modules and option cards.
- February 13, 2014: Various standards in the CE Declaration of Conformity for controllers T-200, T-300E, T-600/600E and T-700 were updated. Their declaration dates now list as February, 2014.
- August 27, 2013: CE Declaration of Conformity for the T-700 (JACE-7) updated.

Contents

| | |
|---|-----------|
| Overview | 1 |
| Change Log | 1 |
| Contents | 3 |
| T-200 (JACE-2) | 5 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 5 |
| Federal Communications Commission (FCC)..... | 5 |
| Canadian Department of Communications (DOC)..... | 5 |
| Declaration of RoHS Compliance | 5 |
| C-Tick (Radiocommunications Determination 1988)..... | 5 |
| CE Declaration of Conformity..... | 6 |
| T-300E (JACE-3E) | 7 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 7 |
| Federal Communications Commission (FCC)..... | 7 |
| Industry Canada Interference-Causing Equipment Standard (ICES) | 7 |
| Declaration of RoHS Compliance | 7 |
| C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997) | 7 |
| CE Declaration of Conformity..... | 8 |
| T-600/T-600E (JACE-6/JACE-6E) and T-600-USA, T-600E-USA | 9 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 9 |
| Federal Communications Commission (FCC)..... | 9 |
| Industry Canada Interference-Causing Equipment Standard (ICES) | 9 |
| Declaration of RoHS Compliance | 9 |
| C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997) | 9 |
| CE Declaration of Conformity..... | 10 |
| T-603/T645 (JACE-603/JACE-645) | 11 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 11 |
| Federal Communications Commission (FCC)..... | 11 |
| Industry Canada Interference-Causing Equipment Standard (ICES) | 11 |
| Declaration of RoHS Compliance | 11 |
| CE Declaration of Conformity..... | 12 |
| T-700 (JACE-7) | 13 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 13 |
| Federal Communications Commission (FCC)..... | 13 |
| Canadian Department of Communications (DOC)..... | 13 |
| Declaration of RoHS Compliance | 13 |
| C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997) | 13 |
| CE Declaration of Conformity..... | 14 |
| Directives and Standards..... | 15 |
| JACE-8000..... | 17 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 17 |
| Federal Communications Commission (FCC)..... | 17 |
| Canadian Department of Communications (DOC)..... | 17 |
| Declaration of RoHS Compliance | 18 |
| RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997) | 18 |
| JACE-8000 Model Number Cross Reference | 18 |
| CE Declaration of Conformity..... | 19 |

| | |
|--|-----------|
| EDGE 10 | 20 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 20 |
| Federal Communications Commission (FCC) | 20 |
| Canadian Department of Communications (DOC) | 20 |
| Declaration of RoHS Compliance | 20 |
| RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997) | 20 |
| CE Declaration of Conformity | 21 |
| T-IO-16-485 | 22 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 22 |
| Federal Communications Commission (FCC) | 22 |
| Canadian Department of Communications (DOC) | 22 |
| Declaration of RoHS Compliance | 22 |
| CE Declaration of Conformity | 23 |
| IO-R-16 & IO-R-34 | 24 |
| Underwriters Laboratories (UL) / Canadian Standards Association (CSA) | 24 |
| Federal Communications Commission (FCC) | 24 |
| Canadian Department of Communications (DOC) | 24 |
| RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997) | 24 |
| Declaration of RoHS Compliance | 24 |
| CE Declaration of Conformity | 25 |
| T-NXT (JACE-NXT) | 26 |
| Underwriter Laboratories Inc. | 26 |
| Federal Communications Commission (FCC) | 26 |
| Canadian Department of Communications (DOC) | 26 |
| CE Declaration of Conformity | 26 |
| Declaration of RoHS Compliance | 26 |
| C-Tick (Radiocommunications Determination 1988) | 26 |
| Option Cards | 27 |
| NPB-2X-REDLINK | 27 |
| CE Declaration of Conformity | 27 |
| CE Declaration of Conformity Signature | 28 |
| Waste of Electrical and Electronic Equipment (WEEE) | 29 |
| RoHS (Restriction of Hazardous Substances) Compliance | 30 |
| BTL (BACnet Testing Laboratories) Certification | 31 |

T-200 (JACE-2)

This documents various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 4- Revision Date 2010/06/04, File E207782
- CSA C22.2 No. 205 Signal Equipment – Edition 1 – Issue Date 1983/06/01

Federal Communications Commission (FCC)

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference with radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference, in which case, users at their own expense will be required to take whatever measures may be required to correct the interference. Any unauthorized modification of this equipment may result in the revocation of the owner's authority to continue its operation.

Canadian Department of Communications (DOC)

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

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 29.

C-Tick (Radiocommunications Determination 1988)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. Honeywell's ACMA (Australian Communications Authority) supplier code is N314.

CE Declaration of Conformity



| | | | |
|--|--|---|--------------------------------------|
| Application of Council Directive: | 2004-108-EC | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | T-200 (10515), IO-16 (10519), NPB-PWR-UN, NPB-LON, NPB-232 | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| EMS Standards Applied: | EN 61326-1: 2013 Class A | Electro-Magnetic Compatibility Emissions, Generic | Complies as documented below |
| | EN 55011:2009 +A1: 2010 | Conducted Emissions - Voltage Class A | Pass Class A |
| | EN 55011:2009 +A1: 2010 | Radiated Emissions- Class A | Pass Class A |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | Pass Criteria B |
| | EN 61000-4-3:2006 +A1:2008 +A2:2010 | Radiated Electromagnetic Field Immunity | Pass Criteria A |
| | EN 61000-4-4:2012 | Electrical Fast Transient / Burst Immunity | Pass Criteria B* |
| | EN 61000-4-5:2007 | Surge Immunity | Pass Criteria B |
| | EN 61000-4-6:2009 | Conducted Radio Frequency Immunity | Pass Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | No magnetically sensitive components |
| | EN 61000-4-11:2004 | Voltage Dips Interruptions and Variations | Pass B, C, C, C |
| | EN 61010-1:2010 + Cor. 1:2011 | Safety requirement for electrical equipment for measurement, control, and laboratory use. | Pass |
| | EN 50581: 2012 | RoHS Directive 2011/65/EC (RoHS 2) | Compliant |
| | * Note 1, A ferrite (Fair-Rite part #0431164181) was placed around a shielded power cord when used in conjunction with the NPB-PWR-UN. | | |

For details about Tridium OEM Partners, refer to the "Tridium OEM Partners Listing" document.

For signature, refer to "CE Declaration of Conformity Signature", page 28.

T-300E (JACE-3E)

This documents various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 4- Revision Date 2010/06/04, File E207782
- CSA C22.2 No. 205 Signal Equipment – Edition 1 – Issue Date 1983/06/01

Federal Communications Commission (FCC)

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 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.

Industry Canada Interference-Causing Equipment Standard (ICES)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 29.

C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. Honeywell’s ACMA (Australian Communications Authority) supplier code is N314.

CE Declaration of Conformity

| | | | |
|--|---|--|--------------------------------------|
| Application of Council Directive: | EMC Directive 2014/30/EU | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | T-300E (12466), IO-16 (10519), NPB-PWR, NPB-LON, NPB-2X-485 | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| EMS Standards Applied: | Standard 61326-1: 2013 Class B | Electro-Magnetic Compatibility Emissions, Generic | Complies as listed below |
| | EN 55011:2009 +A1: 2010 | Conducted Emissions - Voltage Class B | Pass |
| | EN 55011:2009 +A1:2010 | Radiated Emissions- Class B | Pass |
| | EN 61000-3-2:2006 +A1:2009 +A2:2009 | Harmonic Current Emissions | Pass |
| | EN 61000-3-3:2008 | Voltage Fluctuations and Flicker | Pass |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | Pass Criteria B |
| | EN 61000-4-3:2006 +A1:2008 +A2:2010 | Radiated Electromagnetic Field Immunity | Pass Criteria A |
| | EN 61000-4-4:2012 | Electrical Fast Transient / Burst Immunity | Pass Criteria B |
| | EN 61000-4-5:2007 | Surge Immunity | Pass Criteria B |
| | EN 61000-4-6:2009 | Conducted Radio Frequency Immunity | Pass Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | No magnetically sensitive components |
| | EN 61000-4-11:2004 | Voltage Dips Interruptions and Variations | Pass B, B, C, C |
| | EN 61010-1:2010 + Cor. 1:2011 | Safety requirement for electrical equipment for measurement, control, and laboratory use | Pass |
| | EN 50581: 2012 | RoHS Directive 2011/65/EC (RoHS 2) | Compliant |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

T-600/T-600E (JACE-6/JACE-6E)

and T-600-USA, T-600E-USA

This documents various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 4- Revision Date 2010/06/04, File E207782
- CSA C22.2 No. 205 Signal Equipment – Edition 1 – Issue Date 1983/06/01

Federal Communications Commission (FCC)

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 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.

Industry Canada Interference-Causing Equipment Standard (ICES)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 28.

C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. Honeywell’s ACMA (Australian Communications Authority) supplier code is N314.

CE Declaration of Conformity

| | | | |
|--|---|--|--------------------------------------|
| Application of Council Directive: | EMC Directive 2014/30/EU | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | T-600 (10820) / T-600E (10820E), IO-34, NPB-ZWAVE, NPB-SRAM | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| EMS Standards Applied: | EN 61326-1: 2013 Class B | Electro-Magnetic Compatibility Emissions, Generic | Complies as listed below |
| | EN 55011:2009 +A1: 2010 | Conducted Emissions - Voltage Class B | Pass Class B |
| | EN 55011:2009 +A1: 2010 | Radiated Emissions- Class B | Pass Class B |
| | EN 61000-3-2:2006 +A1:2009 +A2:2009 | Harmonic Current Emissions | Pass |
| | EN 61000-3-3:2008 | Voltage Fluctuations/Flicker | Pass |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | Pass Criteria B |
| | EN 61000-4-3:2006 +A1:2008 +A2:2010 | Radiated Electromagnetic Field Immunity | Pass Criteria A |
| | EN 61000-4-4:2012 | Electrical Fast Transient/Burst Immunity | Pass Criteria B* |
| | EN 61000-4-5:2007 | Surge Immunity | Pass Criteria B |
| | EN 61000-4-6:2009 | Conducted Radio Frequency Immunity | Pass Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | No magnetically sensitive components |
| | EN 61000-4-11:2004 | Voltage Dips Interruptions and Variations | Pass B, C, C, C |
| | EN 61010-1:2010 + Cor. 1:2011 | Safety requirement for electrical equipment for measurement, control, and laboratory use | Pass |
| | EN 50581: 2012 | RoHS Directive 2011/65/EC (RoHS 2) | Compliant |
| * Note 1, A ferrite (Fair-Rite part #0431164181) was placed around a shielded power cord when used in conjunction with the NPB-PWR-UN. | | | |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

T-603/T645 (JACE-603/JACE-645)

This documents various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 4- Revision Date 2010/06/04, File E207782
- CSA C22.2 No. 205 Signal Equipment – Edition 1 – Issue Date 1983/06/01

Federal Communications Commission (FCC)

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 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.

Industry Canada Interference-Causing Equipment Standard (ICES)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 28.

CE Declaration of Conformity



| | | | |
|--|---|---|--|
| Application of Council Directive: | EMC Directive 2014/30/EU | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | T-603 (12431), T-603i (12432), T-645 (12433), T-645i (12434) | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| EMS Standards Applied: | EN 61326-1: 2013 Class B | Electro-Magnetic Compatibility Emissions, Generic | Complies as listed below |
| | EN 55011:2009 +A1: 2010 | Conducted Emissions - Voltage Class B | Pass |
| | EN 55011:2009 +A1:2010 | Radiated Emissions- Class B | Pass |
| | EN 61000-3-2:2006 +A1:2009 +A2:2009 | Harmonic Current Emissions | Pass |
| | EN 61000-3-3:2008 | Voltage Fluctuations and Flicker | Pass |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | Pass Criteria B |
| | EN 61000-4-3:2006 +A1:2008 +A2:2010 | Radiated Electromagnetic Field Immunity | Pass Criteria A |
| | EN 61000-4-4:2012 | Electrical Fast Transient / Burst Immunity | Pass Criteria B |
| | EN 61000-4-5:2007 | Surge Immunity | Pass Criteria B |
| | EN 61000-4-6:2009 | Conducted Radio Frequency Immunity | Pass Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | No magnetically sensitive components |
| | EN 61000-4-11:2004 | Voltage Dips Interruptions and Variations | Pass B, B, C, C |
| | EN 61010-1:2010 + Cor. 1:2011 | Safety requirement for electrical equipment for measurement, control, and laboratory use | Pass |
| | EN 50581: 2012 | RoHS Directive 2011/65/EC (RoHS 2) | Compliant |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

T-700 (JACE-7)

Following are various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 4- Revision Date 2010/06/04, File E207782
- CSA C22.2 No. 205 Signal Equipment – Edition 1 – Issue Date 1983/06/01

Federal Communications Commission (FCC)

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference with radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference, in which case, users at their own expense will be required to take whatever measures may be required to correct the interference. Any unauthorized modification of this equipment may result in the revocation of the owner's authority to continue its operation.

Canadian Department of Communications (DOC)

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

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 29.

C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. Honeywell's ACMA (Australian Communications Authority) supplier code is N314.

CE Declaration of Conformity



| | | | |
|--|---|--|--------------------------------------|
| Application of Council Directive: | 2014/30/EU | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | T-700 (11078), NPB-GPRS | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| EMS Standards Applied: | Standard 61326-1:2013 Class A | Electro-Magnetic Compatibility Emissions, Generic | Complies as listed below |
| | EN 55011:2009 +A1: 2010 | Conducted Emissions - Voltage Class A | Pass |
| | EN 55011:2009 +A1: 2010 | Radiated Emissions – Class A | Pass Class A |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | PASS Criteria A |
| | EN 61000-4-3:2006 +A1:2008 +A2:2010 | Radiated Electromagnetic Field Immunity | PASS Criteria A |
| | EN 61000-4-4:2012 | Electrical Fast Transient/Burst Immunity | PASS Criteria B |
| | EN 61000-4-5:2007 | Surge Immunity | Pass Criteria A |
| | EN 61000-4-6:2009 | Conducted Radio-Frequency Immunity | PASS-Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | No magnetically sensitive components |
| | EN 61000-4-11:2004 | Voltage Dips Interruptions and Variations | Pass Criteria A |
| | EN 61010-1:2010 + Cor. 1:2011 | Safety requirement for electrical equipment for measurement, control, and laboratory use | PASS |
| | EN 50581: 2012 | RoHS Directive 2011/65/EC (RoHS 2) | Compliant |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

NOTE: The Siemens TC63 cellular communications module used on the NPB-GPRS modem option card has been approved to comply with the directives and standards listed below:

Directives and Standards

TC63 has been approved to comply with the directives and standards listed below.

Table 1: Directives


| | | |
|------------|---|---|
| 99/05/EC | Directive of the European Parliament and of the council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (in short referred to as R&TTE Directive 1999/5/EC). The product is labeled with the CE conformity mark CE 0682 | |
| 89/336/EC | Directive on electromagnetic compatibility | |
| 73/23/EC | Directive on electrical equipment designed for use within certain voltage limits (Low Voltage Directive) | |
| 2002/95/EC | Directive of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) |  |

Table 2: Standards of North American type approval


| | | |
|-----------------|--|---|
| CFR Title 47 | Code of Federal Regulations, Part 22 and Part 24 (Telecommunications, PCS); US Equipment Authorization FCC | |
| UL 60 950 | Product Safety Certification (Safety requirements) |  |
| NAPRD.03 V3.5.1 | Overview of PCS Type certification review board Mobile Equipment Type Certification and IMEI control. PCS Type Certification Review board (PTCRB) | |
| RSS133 (Issue2) | Canadian Standard | |

Table 3: Standards of European type approval

| | |
|------------------------------------|--|
| 3GPP TS 51.010-1 | Digital cellular telecommunications system (Phase 2); Mobile Station (MS) conformance specification |
| ETSI EN 301 511 V9.0.2 | Candidate Harmonized European Standard (Telecommunications series) Global System for Mobile communications (GSM); Harmonized standard for mobile stations in the GSM 900 and DCS 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC) (GSM 13.11 version 7.0.1 Release 1998) |
| GCF-CC V3.20.0 | Global Certification Forum - Certification Criteria |
| ETSI EN 301 489-1 V1.4.1 | Candidate Harmonized European Standard (Telecommunications series) Electro Magnetic Compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common Technical Requirements |
| ETSI EN 301 489-7 V1.2.1 (2000-09) | Candidate Harmonized European Standard (Telecommunications series) Electro Magnetic Compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 7: Specific conditions for mobile and portable radio and ancillary equipment of digital cellular radio telecommunications systems (GSM and DCS) |
| IEC/EN 60950-1 (2001) | Safety of information technology equipment (2000) |

The Siemens TC63 cellular communications module used on the NPB-GPRS modem option card is FCC approved:

- FCC ID QIPTC63
- Industry Canada Certification Number: 267W-TC63

JACE-8000

This includes JACE-8000 (12977) and option modules: (12978, 12979, and 12980).
This section provides various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 4- Revision Date 2010/06/04, File E207782
- CSA C22.2 No. 205 Signal Equipment – Edition 1 – Issue Date 1983/06/01

Federal Communications Commission (FCC)

This device complies with Part 15 of the FCC Rules. This device also complies with FCC Part 15, Subpart C and Subpart E. 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.

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

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 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.

Canadian Department of Communications (DOC)

This Device complies with Industry Canada License-exempt RSS standard(s). This device also complies with RSS-247 of Industry Canada. Operation is subject to the following two conditions: 1) this device may not cause interference, and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme à la norme d'Industrie Canada, exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: 1) le dispositif ne doit pas causer d'interférences, et 2) le dispositif doit accepter toute interférence, y compris les interférences qui susceptible de provoquer un mauvais fonctionnement de l'appareil.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

En vertu des règlements d'Industrie Canada, cet émetteur de radio ne peut fonctionner qu'en utilisant une antenne d'un type et maximale (ou moins) gain approuvé pour l'émetteur d'Industrie Canada. Pour réduire les interférences radio potentielles aux autres utilisateurs, le type d'antenne et son gain doivent être choisis afin que la puissance isotrope rayonnée équivalente (e.i.r.p.) ne soit pas plus que ce qui est nécessaire pour une communication réussie.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 29.

RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. Honeywell’s ACMA (Australian Communications Authority) supplier code is N314.

JACE-8000 Model Number Cross Reference

| Item Name (from ROHS CoC) | Item Code (from ROHS CoC) | Product Name | Model Number (OS#) | Reference Number(s) |
|-------------------------------------|---------------------------|---------------------------------|--------------------|-----------------------------------|
| TITAN GENERIC DEVICE | 32300323-001 | 12977 CONTROLLER | 32300323-001 | 12977, NPB-8000 |
| ACCESSORY KIT, JACE-8000 CONTROLLER | NPB-8000-KIT | ACCESSORY KIT, 12977 CONTROLLER | NPB-8000-KIT | 32305710-001, 12977 Accessory Kit |
| LON OPTION MODULE | NPB-8000-LON | LON OPTION MODULE | NPB-8000-LON | 12978 |
| DUAL RS485 MODULE | NPB-8000-2X-485 | DUAL RS485 MODULE | NPB-8000-2X-485 | 12979 |
| 232 OPTION MODULE | NPB-8000-232 | 232 OPTION MODULE | NPB-8000-232 | 12980 |
| ACCESSORY KIT, OPTION MODULES | NPB-8000-OPT-KIT | ACCESSORY KIT, OPTION MODULES | NPB-8000-OPT-KIT | -- |

Brand Name(s): Refer to “Tridium OEM Partners Listing” document which is treated as an amendment to this document for a correlation of brand names and products.

CE Declaration of Conformity



| | | | |
|---|---|--|---------------------|
| Application of Council Directive: | 2014/30/EU | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | JACE-8000 (12977) and option modules (12978, 12979, 12980) | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| 2014/53/EU Radio Equipment Directive: | EN 61326-1:2013 Class A | Electrical equipment for measurement, control and laboratory use – EMC requirements — Part 1: General requirements | Compliant |
| | EN 55011:2009 +A1: 2010 | Conducted Emissions - Voltage Class A | PASS |
| | EN 55011:2009 +A1: 2010 | Radiated Emissions – Class B | PASS Class B |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | PASS Criteria B |
| | EN 61000-4-3:2006 +A1:2008 +A2:2010 | Radiated Electromagnetic Field Immunity | PASS Criteria A |
| | EN 61000-4-4:2004 +A1:2010 | Electrical Fast Transient/Burst Immunity | PASS Criteria B |
| | EN 61000-4-5:2006 | Surge Immunity | PASS Criteria A |
| | EN 61000-4-6:2009 | Conducted Radio-Frequency Immunity | PASS-Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | PASS-Criteria A |
| | EN 61000-4-11:2004 | Voltage Dips Interruptions and Variations | Pass Criteria A |
| | EN61000-3-2:2014 | Harmonic Current Emissions | PASS |
| | EN 61000-3-3:2013 | Voltage Fluctuations and Flicker | PASS |
| Radio Equipment Directive Standards Applied: | EN 300 328 V2.1.1 | ERM; Wideband Transmission Systems | Compliant |
| | EN 301 489-1 V2.2.0 | Common Technical Requirements | Compliant |
| | EN 301 489-17 V3.2.0 | Broadband Data Transmissions Systems | Compliant |
| | EN 60950-1:2006/AC:2011 (Amendments A11(2009),A1(2010), A12(2011), and A2 (2013)) | Information Technology Equipment – Safety | Compliant |
| | EN 300 440-2 V1.4.1 | ERM; Short Range Devices | Compliant |
| | EN 301 893 (all except Adaptivity) V2.1.1 | Broadband Radio Networks (BRAN) 5GHz | Compliant |
| | EN 301 893 (Adaptivity) V1.8.1 | Broadband Radio Networks (BRAN) 5GHz | Compliant |
| 2011/65/EU: RoHS Directive | EN 50581: 2012 | RoHS Directive 2011/65/EU (RoHS 2) | Compliant |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

EDGE 10

This section provides information on agency listings and compliances for the EDGE 10 (14039) controller.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 5 - Publication Date 2015/10/22, file E207782
- CSA C22.2 No. 205-12, the standard for Signal Equipment – Edition 2 – Publication Date 2012-11

Federal Communications Commission (FCC)

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference with radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference, in which case, users at their own expense will be required to take whatever measures may be required to correct the interference. Any unauthorized modification of this equipment may result in the revocation of the owner's authority to continue its operation.

Canadian Department of Communications (DOC)

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

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 29.

RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. Honeywell's ACMA (Australian Communications Authority) supplier code is N314.

CE Declaration of Conformity



| | | | |
|--|---|--|---------------------|
| Application of Council Directive: | 2014/30/EU (OJ C 293 of 12/08/2016) | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | EDGE 10 (14039) | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| 2014/53/EU Radio Equipment Directive: | EN 61326-1:2013 Class A | Electrical equipment for measurement, control and laboratory use – EMC requirements — Part 1: General requirements | Compliant |
| | EN 61000-6-3:2018 | Conducted Emissions | PASS Class B |
| | EN 61000-6-3:2018 | Radiated Emissions | PASS Class B |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | PASS Criteria B |
| | EN 61000-4-3:2006 +A1:2008 +A2:2010 | Radiated Electromagnetic Field Immunity | PASS Criteria A |
| | EN 61000-4-4:2004 +A1:2010 | Electrical Fast Transient/Burst Immunity | PASS Criteria B |
| | EN 61000-4-5:2006 | Surge Immunity | PASS Criteria B |
| | EN 61000-4-6:2009 | Conducted Radio-Frequency Immunity | PASS-Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | PASS-Criteria A |
| | EN 61000-4-11:2004 | Voltage Dips Interruptions and Variations | Pass Criteria B |
| | EN61000-3-2:2014 | Harmonic Current Emissions | PASS |
| | EN 61000-3-3:2013 | Voltage Fluctuations and Flicker | PASS |
| 2011/65/EU: RoHS Directive: | EN 50581: 2012 | RoHS Directive 2011/65/EU (RoHS 2) | Compliant |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

T-IO-16-485

This documents various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 4- Revision Date 2010/06/04, File E207782
- CSA C22.2 No. 205 Signal Equipment – Edition 1 – Issue Date 1983/06/01

Federal Communications Commission (FCC)

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference with radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference, in which case, users at their own expense will be required to take whatever measures may be required to correct the interference. Any unauthorized modification of this equipment may result in the revocation of the owner's authority to continue its operation.

Canadian Department of Communications (DOC)

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

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 29.

CE Declaration of Conformity



| | | | |
|--|---|--|------------------------------------|
| Application of Council Directive: | 2014/30/EU | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| Product Model Number: | T-IO-16-485, with the following: MDR-20-15, T-SEC-J-201, T-SEC-6xx, T-SEC-R2R, T-SEC-RIO | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| EMS Standards Applied: | Standard 61326-1:2006 Class A | Electro-Magnetic Compatibility Emissions, Generic | Complies as listed below |
| | EN 61000-6-4 | Electro-Magnetic Compatibility Emissions, Generic | Compliant |
| | EN 61000-6-2 | Electro-Magnetic Compatibility Immunity | Compliant, as noted below |
| | CISPR 22: 2006 | Conducted Emissions - Telecom | Compliant |
| | CISPR 16-2-1 and CISPR 16-2-2 | Limits of Radio Disturbance - Conducted Emissions | Pass Class A Pass Class A |
| | CISPR 16-2-3 | Radiated Emissions | Compliant |
| | IEC 61000-4-2 | Electrostatic Discharge Immunity | Pass Class B |
| | IEC 61000-4-3 | Radiated Field Immunity | Pass Criteria A |
| | IEC 61000-4-4 | Electrical Fast Transient Immunity (Signal Ports) Electrical Fast Transient Immunity (AC Power) | Pass Criteria B Pass Criteria B |
| | IEC 61000-4-5 | Surge Immunity | Pass Criteria B |
| | IEC 61000-4-6 | Conducted Immunity | Pass Criteria B |
| | ICES-003, Issue 4 | Conducted Emissions - Voltage, Class A | Compliant |
| | ICES-003, Issue 4 | Radiated Emissions - Class A | Compliant |
| | IEC 61000-4-11 | Voltage Dips Voltage Interrupts | Pass Criteria A Pass Criteria C |
| | IEC 61010-1:2010 +Cor. 1:2011 | Safety requirement for electrical equipment for measurement, control and laboratory use | Pass |
| RoHS Directive 2011/65/EC | 2011/65/EC (RoHS 2) | Compliant | |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

Note: For CE compliance, the NPB-PWR-UN power supply cannot be used to power the T-IO-16-485 or a JACE (JACE 2/3E/6/6E, T-700). In its place, use the DIN-mountable Tridium model MDR-20-15. This CE-approved power supply is 100-240Vac input, with 15Vdc output at 20W.

Or, power the T-IO-16-485 using another third-party, CE approved, battery backed 12Vdc power supply.

Note: a JACE 2/3E/6/6E or T-700 must be powered by a 15Vdc power supply with CE approval.

IO-R-16 & IO-R-34

This documents various agency listings and compliances for the Tridium® hardware products listed above.

Underwriters Laboratories (UL) / Canadian Standards Association (CSA)

This equipment has been tested and is recognized:

- UL 916 Standard For Energy Management Equipment – Edition 5- Revision Date 2015/10/22, File E207782
- CSA C22.2 No. 205-12 Signal Equipment – Edition 2– Issue Date 2012/11/01

Federal Communications Commission (FCC)

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.

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

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 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.

Canadian Department of Communications (DOC)

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 Règlement sur le matériel brouilleur du Canada.

RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. Honeywell's ACMA (Australian Communications Authority) supplier code is N314.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see "Waste of Electrical and Electronic Equipment (WEEE)" on page 29.

CE Declaration of Conformity



| | | | |
|---|--|------------------------------------|---------------------|
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| This DoC is issued under our sole responsibility and belongs to the following products: | IO-R-16 (14006) IO-R-34 (14022) | | |
| OEM Partners / Brand Name(s): | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| The object of the declaration described above is in conformity with the relevant Union harmonization legislation. Directives Applied: | Electromagnetic compatibility Directive (EMC), 2014/30/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) Directive, 2011/65/EU2 | | |
| | Standard | Description | Criteria Met |
| EMC Standards Applied: | EN61000-6-1 2007 | Immunity | Passed |
| | EN61000-6-3 2007 | Emissions | Passed |
| | EN61000-3-2 2014 | Harmonic current emissions | Passed |
| | EN61000-3-3 2013 | Voltage Fluctuations and Flicker | Passed |
| ROHS Standards: | EN 50581: 2012 | RoHS Directive 2011/65/EU (RoHS 2) | Compliant |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

T-NXT (JACE-NXT)

This documents various agency listings and compliances for the Tridium® hardware products listed above.

Underwriter Laboratories Inc.

This device has approvals to Standard UL 60950-1, File E115352 and Canadian National Standard CAN/CSA-C22.2 No. 60950-1 (I.T.E) or according to UL508, File E85972 and Canadian National Standard CAN/CSA-C22.2 No. 142 (IND.CONT.EQ) or according to Canadian National Standard CAN/CSA-C22.2 No. 14-05.

Federal Communications Commission (FCC)

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.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian Department of Communications (DOC)

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CE Declaration of Conformity

This device fulfills the requirements for the EC directive “204/30/EC Electromagnetic Compatibility,” and the following fields of application apply according to its CE label.

| <i>Area of Application</i> | <i>Requirements for</i> | |
|---|-----------------------------|-----------------------|
| | <i>Emitted Interference</i> | <i>Noise Immunity</i> |
| Residential area, business and trade areas and small business | EN 61000-6-3: 2007 | EN 61000-6-1: 2007 |
| Industry | EN 61000-6-4: 2007 | EN 61000-6-2: 2005 |

Requirements regarding noise immunity to EN 61000-6-2 / IEC 61000-6-2 are met if connected peripherals are suitable for industrial applications. Peripheral devices are only to be connected via shielded cables.

Declaration of RoHS Compliance



This product meets all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in this product are RoHS compliant, and there have been no leaded solders used in manufacture.

Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 29.

C-Tick (Radiocommunications Determination 1988)

This product meets Australian electromagnetic compatibility requirements and radiocommunications standards, and may be legally sold in Australia. The ACMA (Australian Communications Authority) supplier code is N117.

Option Cards

NPB-2X-REDLINK

CE Declaration of Conformity 

Following are various agency listings and compliances for the Tridium® hardware products listed above.

| | | | |
|--|---|---|--------------------------|
| Application of Council Directive: | EMC Directive 2014/30/EU | | |
| Manufacturer's Representative: | Tridium Europe Ltd 1, The Grainstore Brooks Green Road Coolham, West Sussex RH13 8GR United Kingdom | | |
| OEM Partners: | For details about OEM Partners, refer to the "Tridium OEM Partners Listing" document. | | |
| Product Model Number: | NPB-2X-REDLINK | | |
| Type of Equipment: | Electrical Equipment for Measurement, Control and Laboratory Use | | |
| | Standard | Description | Criteria Met |
| EMS Standards Applied: | Standard 61326-1: 2013 Class B | Electro-Magnetic Compatibility Emissions, Generic | Complies as listed below |
| | CISPER 11:2009 +A1: 2010 | Conducted Emissions – Group 1 Class B | Pass |
| | CISPER 11:2009 +A1:2010 | Radiated Emissions- Group 1 Class B | Pass |
| | EN 61000-4-2:2009 | Electrostatic Discharge Immunity | Pass Criteria B |
| | EN 61000-4-3:2006 | Radiated Electromagnetic Field Immunity | Pass Criteria A |
| | EN 61000-4-4:2012 | Electrical Fast Transient / Burst Immunity | Pass Criteria B |
| | EN 61000-4-5:2005 | Surge Immunity | Pass Criteria B |
| | EN 61000-4-6:2009 | Conducted Radio Frequency Immunity | Pass Criteria A |
| | EN 61000-4-8:2010 | Magnetic Immunity | Pass Criteria A |
| | EN 61000-4-11:2004 | Voltage Dips and Interruptions Variations | Pass B, B, C, C |
| | EN 50581: 2012 | RoHS Directive 2011/65/EC (RoHS 2) | Compliant |

For signature, refer to "CE Declaration of Conformity Signature", page 28.

CE Declaration of Conformity Signature

All products listed in the table below conform to CE Standards and Directives as specified in the relevant sections on pages referenced:

| Product Identification | DoC Page |
|--|----------|
| T-200 (JACE-2) | 5 |
| T-300 (JACE-3E) | 7 |
| T-600/T-600E (JACE-6/JACE-6E) and T-600-USA, T-600E-USA | 9 |
| T-603/T645 (JACE-603/JACE-645) | 11 |
| T-700 (JACE-7) | 13 |
| JACE-8000 | 1719 |
| EDGE 10 | 20 |
| T-IO-16-485 | 22 |
| IO-R-16 & IO-R-34 | 24 |
| T-NXT (JACE-NXT) | 26 |
| Option Cards, NPB-2X-REDLINK | 27 |


Signed for and on behalf of Tridium, Inc.



, December, 2018

Jim Bland
President & General Manager
Tridium, Inc.

Waste of Electrical and Electronic Equipment (WEEE)

Recycling of Electronic Products: (International Installations) 

In 2006 the European Union adopted regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away such equipment. Instead, these products must enter the recycling process. To properly dispose of this product, please take it to a local recycling center. If a local recycling center cannot be found, please return it to one of these offices:

Tridium Europe Ltd
1, The Grainstore
Brooks Green Road
Coolham, West Sussex
RH13 8GR United Kingdom

Tridium AP Sales and Technical Service Center (Beijing)
2206F Building-B, Eagle Plaza,
No. 26 Xiaoyun Road,
Chaoyang District, Beijing,
P.R.China (100125)

Tridium, Inc.
9898 Mayland Drive
Richmond, VA 23233

RoHS (Restriction of Hazardous Substances) Compliance



As described in controller product sections of this document: T-200 (JACE-2), T-300E (JACE-3E), T-600/T-600E (JACE-6/JACE-6E), T-603/T645 (JACE-603/JACE-645), T-700 (JACE-7), JACE-8000, and T-NXT (JACE-NXT), these products meet all requirements of RoHS Directive 2011/65/EC (RoHS 2).

The following controller option modules and option cards also meet all requirements of RoHS Directive 2011/65/EC (RoHS 2). All components used in these products are RoHS compliant and there have been no leaded solders used in manufacture.

- IO-16 and IO-16-USA
- IO-16-485
- IO-34 and IO-34-USA
- IO-R-16 & IO-R-34
- NPB-PWR
- NPB-PWR-UN
- NPB-232
- NPB-2X-485
- NPB-LON
- NPB-SED-001
- NPB-SRAM
- NPB-ZWAVE
- NPB-2X-REDLINK
- JACE-8000
- NPB-GPRS

BTL (BACnet Testing Laboratories) Certification

Depending on installed Niagara software release, controller products listed in this document may have a BTL listing as a **BACnet Building Controller (B-BC)**. BTL certification means the product was tested by an official BACnet Testing Laboratory to certify its BACnet PICS (Protocol Implementation Conformance Statement).

At the time of publication of this document, Tridium-specific details are located at the BACnet® International website at the following URL: <http://www.bacnetinternational.net/catalog/index.php?m=18>

Included are links to the BACnet PICS documents to which the controllers were tested.

Index

| | | | |
|-------------------------|--------------|---------------------|--------|
| Bacnet | 31 | NPB-PWR-UN..... | 6, 30 |
| BTL | 31 | NPB-SED-001 | 30 |
| IO-16..... | 6, 8, 12, 30 | NPB-SRAM | 10, 30 |
| IO-16-485 | 30 | NPB-ZWAVE..... | 10, 30 |
| IO-34..... | 10, 30 | Option Cards..... | 27 |
| IO-R-16 & IO-R-34 | 24 | RoHS | 30 |
| JACE-3E..... | 7 | T-200 (JACE-2)..... | 5 |
| JACE-6 | 9 | T-300E | 7 |
| JACE-603 | 11 | T-600 | 9 |
| JACE-645 | 11 | T-600E | 9 |
| JACE-6E | 9 | T-603..... | 11 |
| JACE-8000 | 17 | T-603i..... | 12 |
| JACE-NXT | 26 | T-645..... | 11 |
| NPB-232 | 6, 30 | T-700 (JACE-7)..... | 13 |
| NPB-2X-485 | 8, 12, 30 | T-IO-16-485 | 22, 24 |
| NPB-2X-REDLINK..... | 27 | T-NXT | 26 |
| NPB-GPRS | 15 | Waste disposal..... | 29 |
| NPB-LON..... | 6, 8, 12, 30 | WEEE | 29 |
| NPB-PWR..... | 8, 12, 30 | | |