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powered by niagara4 framework

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

- 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.

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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 numerique de la classe A respecte toutes les exigencies du Reglement sur le material broilleur 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 25.

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 CE

Application of Council Directive:	2004-108-EC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233 United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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.

I, **Nino DiCosmo**, President of Tridium Inc., hereby declare that the equipment specified above conforms to the above Directives and Standards.

September, 2014

Nino DiCosmo
President, Tridium

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 numerique 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 25.

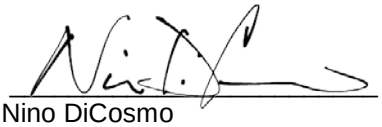
C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

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

CE Declaration of Conformity CE

Application of Council Directive:	EMC Directive 2004-108-EC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233 United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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

I, **Nino DiCosmo**, President of Tridium Inc., hereby declare that the equipment specified above conforms to the above Directives and Standards.



September, 2014

Nino DiCosmo
President, Tridium

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 numerique 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 25.

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

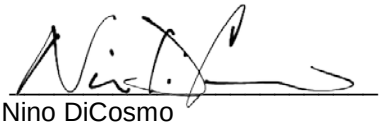
This product meets Australian electromagnetic compatibility requirements and rediocommunications standards, and may be legally sold in Australia. Honeywell’s ACMA (Australian Communications Authority) supplier code is N314.

CE Declaration of Conformity CE

Application of Council Directive:	2004-108-EC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233 United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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.

I, **Nino DiCosmo**, President of Tridium Inc., hereby declare that the equipment specified above conforms to the above Directives and Standards.



September, 2014

Nino DiCosmo
President, Tridium

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 numerique 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.

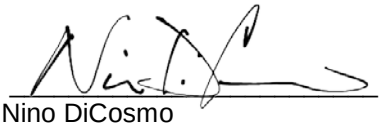
Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of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

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 25.

CE Declaration of Conformity

Application of Council Directive:	EMC Directive 2004-108-EC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233 United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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

I, **Nino DiCosmo**, President of Tridium Inc., hereby declare that the equipment specified above conforms to the above Directives and Standards.



September, 2014

Nino DiCosmo
President, Tridium

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 numerique de la classe A respecte toutes les exigencies du Reglement sur le material broilleur 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 25.

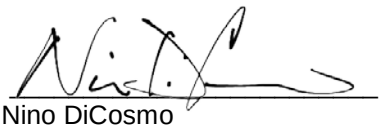
C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

This product meets Australian electromagnetic compatibility requirements and rediocommunications 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:	89/336/EEC, 92/31/EEC, 73/23/EEC, 93/68/EEC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233 United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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

I, **Nino DiCosmo**, President of Tridium Inc., hereby declare that the equipment specified above conforms to the above Directives and Standards.



September, 2014

Nino DiCosmo
President, Tridium

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 25.

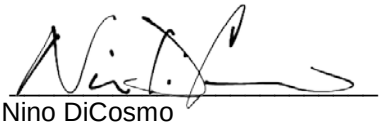
C-Tick/RCM (Radiocommunications Act 1992 and the Telecommunications Act 1997)

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

CE Declaration of Conformity CE

Application of Council Directive:	89/336/EEC, 92/31/EEC, 73/23/EEC, 93/68/EEC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233, United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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***
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 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
	EN61000-3-2:2006 +A1/A2:2009	Harmonic Current Emissions	PASS
	EN 61000-3-3:2008	Voltage Fluctuations and Flicker	PASS
	EN 50581: 2012	RoHS Directive 2011/65/EU (RoHS 2)	Compliant
R&TTE Standards Applied:	2014/53/EU	European Radio Equipment Directive (RED)	Complies as listed below
	EN 300 328 V1.9.1	ERM; Wideband Transmission Systems	Compliant
	EN 301 489-1 2008-04	Common Technical Requirements	Compliant
	EN 301 489-17 2012-09	Broadband Data Transmissions Systems	Compliant
	EN 60950-1:2006/AC:2011	Information Technology Equipment – Safety	Compliant

I, **Nino DiCosmo**, President of Tridium Inc., hereby declare that the equipment specified above conforms to the above Directives and Standards.



February, 2016

Nino DiCosmo
President, Tridium

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 numerique de la classe A respecte toutes les exigencies du Reglement sur le material broilleur 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.

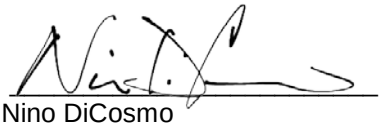
Related to the RoHS (Restriction of Hazardous Substances) Directive is another European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). The WEEE Directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of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

For related details, see “Waste of Electrical and Electronic Equipment (WEEE)” on page 25.

CE Declaration of Conformity CE

Application of Council Directive:	EU/EMC 2004/108/EC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233, United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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		
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

I, **Nino DiCosmo**, President of Tridium Inc., hereby declare that the equipment specified above conforms to the above Directives and Standards.



February, 2016

Nino DiCosmo
President, Tridium

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.

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 CE

This device fulfills the requirements for the EC directive “204/108/EEC Electromagnetic Compatibility,” and the following fields of application apply according to its CE label.

Area of Application	*Requirements for*	
	Emitted Interference	*Noise Immunity*
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 25.

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 CE

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

Application of Council Directive:	EMC Directive 2004-108-EC		
Manufacturer:	Tridium Inc. 3951 Westerre Parkway, Suite 350 Richmond, Virginia 23233 United States of America		
Manufacturer's Representative:	Nino DiCosmo, President Tridium Inc.		
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 Interruptions and Variations	Pass B, B, C, C
	EN 50581: 2012	RoHS Directive 2011/65/EC (RoHS 2)	Compliant

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.
2256 Dabney Road, Suite C
Richmond, VA 23230

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
- 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.

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