

## EU Declaration of Conformity

This declaration of conformity is issued under the sole responsibility of the manufacturer.

**We, the undersigned:**

<b>Manufacturer:</b>	<b>Bitronics LLC</b> 261 Brodhead Road Bethlehem, PA 18017-8698, USA <b>T</b> +610.997.5100 <b>F</b> +610.997.5450 <b>E</b> <a href="mailto:bitronics@novatechweb.com">bitronics@novatechweb.com</a>	<b>Authorized Representative in the European Union:</b>	<b>NovaTech Europe BVBA</b> Kontichsesteenweg 71 2630 Aartselaar, Belgium <b>T</b> +32.3.458.0807 <b>F</b> +32.3.458.1817 <b>E</b> <a href="mailto:info.europe@novatechweb.com">info.europe@novatechweb.com</a>
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**hereby declare that the following product(s):**

<b>Product type:</b>	M870 Series
<b>Description:</b>	M87x IEDs / Multi-Function Recording Transducers and Event Monitors
<b>Models (Object of Declaration):</b>  <small>[Modules in gray text = NOT RoHS compliant]</small>	<b>M871 - using chassis C07A5, C10A7, or C12x8 with any of the following modules or components:</b> A10, H10, H11, H12, P10, P11, P12, P20, P30A, P31, P32, P40, S10uc, S11uc, S12uc, V10, M870-MODIRIGBCV.
	<b>M872 - using chassis C10A7, or C12x8 with any of the following modules or components:</b> A10, H10, H11, H12, P10, P11, P12, P20, P30A, P31, P32, P40, S13uc, S14uc, S15uc, S16uc, S17uc, V10, M870-MODIRIGBCV.
	<b>878 - using chassis C07A5, C10A7, or C12x8 with any of the following modules or components:</b> H10, H11, H12, P10, P11, P12, P20, P30A, P31, P32, P40, V10, M870-MODIRIGBCV.

**Conform(s) with the protection requirements of the following directive(s):**

<ol style="list-style-type: none"> <li>1. European Community Directive on EMC (EMCD) 2014/30/EU, superceding 2004/108/EC, and Directive 91/263/EC [TTE/SES]. Fulfilment of the essential requirements set out in Annex I has been demonstrated.</li> <li>2. European Community Directive on Low Voltage (LVD) 2014/35/EU, superceding 2006/95/EC. Fulfilment of the safety objectives referred to in Article 3 and set out in Annex I has been demonstrated.</li> <li>3. European Community Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS "recast"), 2011/65/EU. Fulfilment of the essential requirements referred to in Article 4 has been demonstrated.</li> </ol>
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**To the best of our knowledge,**

**The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:**

- 2014/30/EU** - EMCD Directive (from April 20th, 2016), superceding 2004/108/EC (withdrawn April 19th, 2016),
- 2014/35/EU** - LVD Directive (from April 20th, 2016), superceding 2006/95/EC (withdrawn April 19th, 2016),
- 2011/65/EU** - RoHS ("recast") Directive of the European Parliament and of the Council of 8 June 2011.

**Reference Number :** DOC B001  
**Date of issue :** 12-January-2018

**Issue :** S

The following route(s) were used to establish conformity:

**1. 2014/30/EU: (EMCD) In accordance with**

Article 14, Annex II (internal production control) supported by a Technical File, superceding 2004/108/EC, in accordance with Article 7, Annex II.

<b>Technical Construction File No. :</b>	RFI/TCFT1/43054JD02 including Annex/Appendices
<b>Date Revised :</b>	14-Dec-2016 or later- New Legislative Framework & EMC Directive (original issue dated 07-January-2003); (prior re-issue dated 30-November-2012)
<b>Conformity Assessment Body : (C.A.B.)</b>	Radio Frequency Investigation Ltd Ewhurst Park, Ramsdell, Basingstoke, Hampshire, England. RG26 5RQ.
	Underwriters Laboratories, Inc., Melville Division 1285 Walt Whitman Road, Melville, NY 11747-3081 USA
<b>Compliance Certificate / Test Report:</b>	RFI/CBCB2/43054JD03 E164178, 03ME15424, M871, MA/EMC; E164178, 03ME15424/04ME06474, M877, MA/EMC; E164178, 04CA42217, M871 in C12X8, MA/EMC; E164178, 06CA09838, M87x IRIG-B Converter, EMC, File MC15156; E164178, 06CA43637, M872 with P40 Module in C10A7, MA/EMC; E164178, 1001052984, M87x, M57x, M870D, M570Dx EMC 09CA09082; E164178, 12ME06094, M87x with H12, EMC, incl. tests by MFG.

**2. 2014/35/EU: (LVD)**

Self Certification supported by a Technical File, in accordance with Article 12, Annex III (internal production control), superceding 2006/95/EC.

<b>Technical File No. :</b>	TF B001
<b>Date Revised :</b>	21-Dec-2016 or later - New Legislative Framework & LVD Directive (original issue dated 02-December-2002); (re-issue dated 01-October-2013 covered transition to IEC 61010-1 Ed. 3)
<b>Conformity Assessment Body : (C.A.B.)</b>	UL Northbrook, 333 Pflingsten Rd, Northbrook, IL 60062-2096, USA
<b>Compliance Certificate / Test Report:</b>	CB Certificate No. US-22412-UL issued by National Certification Body: UL (US), 333 Pflingsten Rd., IL 60062, Northbrook, USA / CB Test Report E164178-A3-CB-1-Original and E164178-A3-CB-1-Correction-1, Models M87x, or 87x, Product Safety Assessment, Project 13ME04905 & SR40508.20439.

**Reference Number :** DOC B001

**Issue :** S

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**3. 2011/65/EU: (RoHS “recast”)** Restriction of the use of certain hazardous substances in electrical and electronic equipment(\*)  
Self Certification supported by a Technical File, in accordance with Article 4 (internal production control).

<b>Technical File No. :</b>	TF B001-RoHS2 (ANNEX)
<b>Date Revised :</b>	12-Jan-2018 or later - New Legislative Framework & RoHS (recast) Directive

The objects declared as RoHS compliant have a maximum concentration of 0.1% by weight in homogeneous materials for lead, hexavalent chromium, mercury, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), and 0.01% for cadmium, or qualify for an exemption to the limits as defined in Annex III or Annex IV of the RoHS Directive. Bitronics LLC certifies that the object(s) of declaration meet(s) the material requirements of the RoHS Directive 2011/65/EU, except where an exemption is allowed by the Directive. ROHS compliant means that the substances restricted by the RoHS Directive and the subsequent amendments of the European Parliament are not contained in the finished product above the Maximum Concentration Limits, as stated below, unless the restrictive substance is subject to an exemption contained in Annex III or Annex IV of the RoHS Directive and subsequent amendments.

RoHS part compliance information has been determined based upon reasonable inquiries of our suppliers and represents our current actual knowledge based on the information provided.

<b>Restricted Substance for EU RoHS</b>	<b>Maximum Concentration Limit (Allowable limit at homogeneous material level*)</b>
Lead (Pb)	0.1% by weight (1000 ppm)
Mercury (Hg)	0.1% by weight (1000 ppm)
Cadmium (Cd)	0.01% by weight (100 ppm)
Hexavalent chromium (Cr)	0.1% by weight (1000 ppm)
Polybrominated biphenyls (PBB)	0.1% by weight (1000 ppm)
Polybrominated diphenyl ethers (PBDE)	0.1% by weight (1000 ppm)
Bis(2-ethylhexyl) phthalate (DEHP)	0.1% by weight (1000 ppm), effective from 22 July 2021
Butyl benzyl phthalate (BBP)	0.1% by weight (1000 ppm), effective from 22 July 2021
Dibutyl phthalate (DBP)	0.1% by weight (1000 ppm), effective from 22 July 2021
Diisobutyl phthalate (DIBP)	0.1% by weight (1000 ppm), effective from 22 July 2021

- ‘homogeneous material’ means one material of uniform composition throughout or a material, consisting of a combination of materials, that cannot be disjointed or separated into different materials by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes;

**RoHS Exemptions:** Parts that exceed the maximum concentration limits at the homogeneous material level rely exclusively on the following exemption(s):

**3.1 Exemptions allowed in Annex III**, entitled Applications exempted from the restrictions in Article 4(1):

- 6(c): Copper alloy containing up to 4% lead by weight.
- 7(a): Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead).
- 7(c)-1: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

**3.2 Exemptions allowed in Annex IV**, entitled Applications exempted from the restriction in Article 4(1) specific to medical devices and monitoring and control instruments, as amended by Directive 2014/74/EU:

- 36. Lead used in other than C-press compliant pin connector systems for industrial monitoring and control instruments. Expires on 31 December 2020. May be used after that date in spare parts for industrial monitoring and control instruments placed on the market before 1 January 2021.


**Reference Number :** DOC B001

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**The following standards were used for reference and to establish conformity :**

IEC/EN 61010-1, Edition 3, 2010 UL 61010-1, Edition 3, 2012/05/11 CAN/CSA No. 22.2, No. 61010-1-12, Ed. 3, 2012/05/01	Safety requirements for electrical equipment for measurement, control, and laboratory use. Part 1: General requirements
IEC/EN 61010-2-030, Edition 1, 2010 UL 61010-2-030, Edition 1, 2012/05/11 CAN/CSA No. 22.2, No. 61010-2-030-12, Ed. 1, 2010/06/10	Safety requirements for electrical equipment for measurement, control and laboratory use. Part 2-030: Particular requirements for testing and measuring circuits
EN 61326-1: 2013	Electrical Equipment for measurement, control and laboratory use – EMC requirements
IEC/EN 60255-26: 2013 + AC: 2013 product standard used in part - reliance on basic standards	Electrical relays, Electromagnetic compatibility requirements for measuring relays and protection equipment
EN 61000-6-4: 2007 + A1: 2011	Electromagnetic compatibility Part 6-4: Generic emission standard – Industrial environment.
EN 61000-6-2: 2005 + AC: 2005	Electromagnetic compatibility (EMC) Part 6-2: Generic standards - Immunity for Industrial environments.
EN 55011: 2009 + A1: 2010, EN 55011: 2016, Group 1 Class A	Radiated Emissions Electric Field Strength, AC Powerline Conducted Emissions
EN 55022: 2010 + AC: 2011 EN 55032: 2012 + AC: 2013 EN 55032: 2015 + AC: 2016-07 Group 1 Class A (Conducted on Ethernet port)	Electromagnetic compatibility of multimedia equipment - Emission Requirements
EN 61000-4-2: 2009	Electrostatic Discharge (ESD)
EN 61000-4-3: 2006 + A1:2008 + A2: 2010, Class III	Immunity to Radiated Electromagnetic Energy (Radio Frequency)
EN 61000-4-4: 2012, Severity Level 4	Electrical Fast Transient / Burst Immunity
EN 61000-4-5: 2014, Installation Class 3	Surge Immunity
EN 61000-4-6: 2014, Level 3	Immunity to Conducted Disturbances Induced by Radio Frequency Fields
EN 61000-4-8: 2010	Immunity to Power Frequency Magnetic Fields
EN 61000-4-11: 2004	AC Supply Voltage Dips and Short Interruptions
IEC 60255-22-1: 1988, Class III	Electrical disturbance tests for measuring relays and protection equipment. Part 1: 1 MHz Burst disturbance tests.
EN 50581: 2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Signed for and on behalf of the Company :	
	Alan Staatz, Vice President, Engineering, Novatech, LLC / Lenexa, Kansas USA

**CE** Marking Year 2002, 2004, 2005, 2006, 2009, 2012, 2013, 2016, 2018

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