

EU Declaration of Conformity

Manufactured by: EBTRON, Inc., 1663 Hwy 701 S, Loris, SC 29569 USA

Machinery having been tested: **GTU116e-x**, serial number: **1183357**

Directives covered by this Declaration

Directive, 2014/30/EU, relating to Electromagnetic Compatibility (EMC)

Directive, 2014/53/EU, relating to Radio Equipment Directive (RED)

Directive, 2011/65/EU (Including 2015/863/EU) RoHS

Products Covered by this Declaration

The following products are compliant with the essential requirements and other relevant provisions of the Electromagnetic Compatibility Directive (EMC) 2014/30/EU, the Radio Equipment Directive (RED) 2014/53/EU and the Restriction of the use of certain Hazardous Substances Directive (RoHS) 2011/65/EU / 2015/863/EU with RoHS exemption 7a, and 7(c)-i.

EBTRON® Advantage Gold Series, GTx116e-x Model Transmitters, with -P or -B type Probes Sensors for Air Velocity and Temperature Measurement, named as follows: Sub Models: GTC116e-x; GTM116e-x; GTA116e-x; GTF116-x; GTU116e-x conform with the requirements in accordance with the following European Standards:

The following Harmonized Standards and normative references were used as guidance.

Basic Standard	Date	Description
BS EN55011	2009	Limits and methods of measurement of radio interference characteristics of industrial, scientific, and medical equipment
+A1	2010	Radiated Emissions
EN61326-1	2013	Testing and measurement techniques
EN61000-4-2	2009	Electrostatic discharge immunity test
EN61326-1	2013	Electromagnetic compatibility-Basic Immunity Standard
EN61000-4-3+A2	2009	Radiated radio frequency electromagnetic field immunity test.

Technical documentation is compiled in accordance with Article 7 & Annex II of the Directive. The Technical File provides evidence of the conformity of the apparatus with the essential requirements of the Directive(s). We undertake to transmit, in response to a reasoned request by the appropriate national authorities, relevant information on the completed equipment identified above. The method of transmission shall be electronic in the form of a PDF document or documents.

The indicated machinery may include a Microchip Technology RN4020 or a Dialog Semiconductor DA14531MOD, Bluetooth Low Energy Module, meeting the following test standards:

Microchip Technology RN4020

Certification	Standard	Article
Safety	EN 60950-1: 2006 / A11:2009 / A1:2010 / A12:2011 / A2:2013	(3.1(a))
Health	EN 62476:2010	
EMC	EN 301 489-1 V2.1.1	
	EN 301 489-1 V2.2.0	
	EN 301 489-17 V3.1.1 EN 301 489-17 V3.2.0	
Radio	EN 300 328 V2.1.1	3(2)

Dialog Semi DA14531MOD

Certification	Standard
Safety	EN 62368-1
Health	EN 62479:2010
EMC	EN 301 489-1 v2.1.1 EN 301 489 v3.1.1
Radio	EN 300 328 V2.2.2 (2019-07)

Signed:



Date: 12 May 2022

Authority: David S. Dougan, President, **EBTRON, Inc.**

Place: 1663 Highway 701 S, Loris, SC 29569

Attention!

The attention of the specifiers, purchaser, installer or user is drawn to special measures and limitations to use that must be observed when these products are taken into service to maintain compliance with the above directives. Details of these special measures and limitations to use are available on request and are also contained in the product manuals.

Manufacturer's Headquarters: 1663 Highway. 701 S. • Loris, SC 29569 • USA

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EU Declaration of Conformity

Manufactured by: EBTRON, Inc., 1663 Hwy 701 S, Loris, SC 29569 USA

Machinery having been tested: GTU108e-F/A8, serial number: 1260775

Directives covered by this Declaration

Directive, 2014/30/EU, relating to Electromagnetic Compatibility (EMC)

Directive, 2014/53/EU, relating to Radio Equipment Directive (RED)

Directive, 2011/65/EU (Including 2015/863/EU) RoHS

Products Covered by this Declaration

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EBTRON® Advantage Gold Series, GTx108e-x Model Transmitters, with -F type Probes Sensors for Air Velocity and Temperature Measurement, named as follows: Sub Models: GTC108e-x; GTM108e-x; GTA108e-x; GTF108-x; GTU108e-x conform with the requirements in accordance with the following European Standards:

The following Harmonized Standards and normative references were used as guidance.

Basic Standard	Date	Description
BS EN55011	2016	Limits and methods of measurement of radio interference characteristics of industrial, scientific, and medical equipment
+A11	2020	Radiated Emissions
EN61326-1	2013	Testing and measurement techniques
EN61000-4-2	2009	Electrostatic discharge immunity test
EN61326-1	2013	Electromagnetic compatibility-Basic Immunity Standard
EN61000-4-3	2006	Radiated radio frequency electromagnetic field immunity test.
+A2	2010	

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The indicated machinery may include a Microchip Technology RN4020 or a Dialog Semiconductor DA14531MOD, Bluetooth Low Energy Module, meeting the following test standards:

Microchip Technology RN4020

Certification	Standard	Article
Safety	EN 60950-1: 2006 / A11:2009 / A1:2010 / A12:2011 / A2:2013	(3.1(a))
Health	EN 62476:2010	
EMC	EN 301 489-1 V2.1.1	
	EN 301 489-1 V2.2.0	
	EN 301 489-17 V3.1.1	
	EN 301 489-17 V3.2.0	
Radio	EN 300 328 V2.1.1	3(2)

Dialog Semi DA14531MOD

Certification	Standard
Safety	EN 62368-1
Health	EN 62479:2010
EMC	EN 301 489-1 v2.1.1
	EN 301 489 v3.1.1
Radio	EN 300 328 V2.2.2 (2019-07)

Signed:



Date: 12 May 2022

Authority: David S. Dougan, President, **EBTRON, Inc.**

Place: 1663 Highway 701 S, Loris, SC 29569

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EU Declaration of Conformity Supplement for

Ebtron's GTx116e-x / GTx108e-x Family of Products

The Ebtron GTx116e and GTx108e are both Airflow and Temperature measurement machinery utilizing the same electronic hardware. The physical difference between the two are in the connector card, which dictates the type of airflow and temperature sensor that can be connected and is dependent on the system application.

GTx116e Family: GTA116e-x, GTC116e-x, GTM116e-x, GTU116e-x, GTF116e-x

Family Representative: **GTU116e-x**

GTx108e Family: GTA108e-F/xx, GTC108e-F/xx, GTM108e-F/xx, GTU108e-F/xx, GTF108e-F/xx

Family Representative: **GTU108e-F/A8**

Frequency Generators for each Family Member. The Main Baseboard is present in all configurations.

	GTx116e-x	GTx108e-x
A - Main Baseboard	Microcontroller – 72Mhz 17V Power Supply – 319kHz 5V Power Supply – 505kHz 3V3 Power Supply – 1Mhz ISO15V Power Supply – 115kHz ISO 5V power Supply – 1Mhz ISO -5V Power Supply – 250kHz Bluetooth Low Energy Radio Module: Freq: 2.4Ghz Antenna Gain: Embedded PCB antenna -23dBi	Same as GTx116e
Sensor Connector card	None	Microcontroller- 21Mhz
C – RS485 Card	None	None
M – Ethernet Card	Microcontroller – 96Mhz Oscillator – 50Mhz LAN – 48Mhz	Same as GTx116e
U – USB Card	Microcontroller – 48Mhz Oscillator – 8Mhz RTC Oscillator -32kHz	Same as GTx116e
F – ECHELON Card	Microcontroller – 50Mhz Oscillator – 10Mhz	Same as GTx116e

From an Engineering and Physics standpoint there should be no EMC differences between the two families.

Document prepared by Patrick Clapsaddle, Product Engineering

Signed: 

Date: 7 July 2021

Authority: David S. Dougan, President, **EBTRON, Inc.**

EU Declaration of Conformity

Manufactured by: EBTRON, Inc., 1663 Hwy 701 S., Loris, SC 29569 USA

Machinery having been tested: HTA104-P, serial number: ITEM 001
HTN104-B, serial number: ITEM#2
HTA104-F, serial number: ITEM 003

Directives covered by this Declaration

Directive 2004/108/EC, relating to Electromagnetic Compatibility (EMC)
Directive, 2011/65/EU (Including 2015/863/EU) RoHS

Products Covered by this Declaration

The following products are compliant with the essential requirements and other relevant provisions of the Electromagnetic Compatibility Directive (EMC) 2004/108/EC and the Restriction of the use of certain Hazardous Substances Directive (RoHS) 2011/65/EU / 2015/863/EU with RoHS exemption 7a, and 7(c)-i.

EBTRON[®] Advantage Hybrid Series, HTx104 Transmitters, with -B, -F, -P, -T or -U Type Probes
Sensors for Air Velocity and Temperature Measurement named as follows:

Sub Models: HTA104-x, HTN104-x conform with the requirements in accordance with the following European Directive:

The following Harmonized Standards and normative references were used as guidance.

Electromagnetic Emission

EN 61326-1:2013	Radiated disturbance	- CISPR 11:2009, inc A1:2010, Class A
	Conducted disturbance	- CISPR 11:2009, inc A1:2010, Class A
EN 61000-3-2:2006 inc A1/A2:2009	Mains harmonics	- Class A
EN 61000-3-3:2013	Mains voltage flicker (dmax=4%)	

Electromagnetic Immunity

EN 61326-1:2013 Basic immunity requirement (Table 1)	Electrostatic discharge	- EN 61000-4-2:2009
	Radiated RF interference	- EN 61000-4-3:2006 inc A1:2008 & A2:2010
	Fast transient bursts	- EN 61000-4-4:2012
	Surge	- EN 61000-4-5:2006
	Conducted RF field	- EN 61000-4-6:2009
	Voltage dips and interruptions	- EN 61000-4-11:2004

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Signed:



Date: 16 June 2022

Authority: David S. Dougan, President, **EBTRON, Inc.**

Place: 1663 Highway 701 S, Loris, SC 29569

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