



# Certificate of Compliance

**Certificate:** 2472435

**Master Contract:** 216311

**Project:** 70009926

**Date Issued:** December 18, 2014

**Issued to:** **Extreme Telematics Corp.**  
2710 17th Ave SE, Suite 630  
Calgary, AB T2A 0P6  
Canada  
Attention: James La Haye

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*



*John Yam*

**Issued by:** John Yam

## **PRODUCTS**

**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

**CLASS 2258 84** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - - For Hazardous Locations - Certified to US Standards

**Class I, Division 1, Groups C and D; Class I, Zone 0, Ex/AEx ia [ia] IIB:**

ET-12001 Series of Plunger Lift Controller; Permanently mounted, Intrinsically safe and suitable for use in Class I, Division 1, Groups C and D, Zone 0, Groups IIB hazardous locations when installed in accordance with installation instructions ET-12001-1012-0000; Temperature Code T3; Ambient temperature range -40°C to +70°C. Battery powered by 6.0Vdc nom. (Intrinsically safe battery packs part numbers ET-12001-1008-0001 and ET-12001-1008-0002).



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Receives intrinsically safe inputs and outputs with the following entity parameters:

<b>Solar Panel Input</b>	<b>RS485 (COM1 / COM2)</b>	<b>COM1 / COM2</b>	<b>CP/DP, LP, PAS (PWR, COM)</b>	<b>CP/DP, LP, PAS (SIG, COM)</b>
Vmax = 15.5Vdc	Vmax = 8.0Vdc	Voc = 8.0V	Voc = 8.0V	Voc = 8.0V
I <sub>max</sub> = 160mA	I <sub>max</sub> = 160mA	I <sub>sc</sub> = 108mA	I <sub>sc</sub> = 81.0mA	I <sub>sc</sub> = 0.80mA
C <sub>i</sub> = 0.1µF	C <sub>i</sub> = 0.0µF	C <sub>a</sub> = 10µF	C <sub>a</sub> = 10µF	C <sub>a</sub> = 10µF
L <sub>i</sub> = 0µH	L <sub>i</sub> = 0µH	L <sub>a</sub> = 50µH	L <sub>a</sub> = 50µH	L <sub>a</sub> = 50µH
P <sub>max</sub> = 1.6W	P <sub>max</sub> = 0.8W	P <sub>max</sub> = 216mW	P <sub>max</sub> = 162mW	P <sub>max</sub> = 1.62mW

**APPLICABLE REQUIREMENTS**

CSA Standard C22.2 No. 0-10 - General Requirements - Canadian Electrical Code Part II

CSA Standard C22.2 No.142-M1987 - Process Control Equipment

CSA Standard C22.2 No. 157-M1992 - Intrinsically Safe and Non-Incendive Equipment for Use  
in Hazardous Locations

CAN-CSA E60079-0: 02 - Electrical Apparatus for explosive gas atmospheres - Part 0-General Requirements.

CAN-CSA E60079-11: 02 - Electrical Apparatus for Explosive Gas Atmospheres - Part 11-Intrinsic Safety 'i'

UL 508 - 17th Ed - Industrial Control Equipment.

UL 913 - 7th Ed - Intrinsically Safe Apparatus and Associated Apparatus for Use in  
Class I, II and III Division 1 Hazardous (Classified) Locations.

UL 60079-0 - 5th Ed - Electrical Apparatus for Explosive Gas Atmospheres - Part 0 - General Requirements.

UL 60079-11 - 5th Ed - Electrical Apparatus for Explosive Gas Atmospheres - Part 11 - Intrinsic Safety 'i'.



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## **MARKINGS**

### *Divisions & Zones Model Series:*

- Submitter's name, trademark, or the CSA file number (adjacent the CSA Mark).
- Catalogue / Model designation.
- Date code / Serial number traceable to month and year of manufacture.
- The CSA Mark with “c\_us” indicators, as shown on the Certificate of Compliance; *“The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.”*
- The hazardous location designation “Class I, Division 1, Groups C and D; Class I, Zone 0”
- The symbol “Ex/AEx ia [ia]”
- The words “INTRINSICALLY SAFE” and “ASSOCIATED APPARATUS”
- The ambient temperature range “-40°C to +70°C”
- The Entity Parameters as applicable
- The designation of terminals (polarity, etc.)
- Reference to installation drawing (ET-12001-1012-0000)
- Reference to acceptable battery packs (ET-12001-1008-0001 and ET-12001-1008-0002)
- The following warning statement:
  - WARNING - SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY
  - AVERTISSEMENT: LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE (or equivalent)