IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx EXV 23.0026X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2023-09-25

Applicant: **Acura Embedded Systems**
Suite #101
17825 64th Ave
Surrey, BC V3S 1Z3
Canada

Equipment: **Panel PC - Roughneck 15" and Roughneck 22"**

Optional accessory:

Type of Protection: **Increased Safety "e"**

Marking: Ex ec IIB T4 Gc

-20°C ≤ Tamb ≤ +50°C

Approved for issue on behalf of the IECEx Certification Body: **Sean Clarke CEng MSc FIET**

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom

IECEx Certificate of Conformity

Certificate No.: **IECEx EXV 23.0026X** Page 2 of 3

Date of issue: 2023-09-25 Issue No: 0

Manufacturer: **Acura Embedded Systems**
Suite #101
17825 64th Ave
Surrey, BC V3S 1Z3
Canada

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

GB/EXV/ExTR23.0087/00

Quality Assessment Report:

GB/EXV/QAR23.0002/00

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Acura Embedded System Inc. designs and manufacture Roughneck 15'' and 22" industrial panel pc with touch screen capability intended to be used outdoor in hazardous location. Maximum operating ambient temperature range is -20°C to 50°C. Unit has metallic enclosure with made of aluminum with glass facing for touch screen capability. It is designed to operate for using in built power supply which supports 110 - 220VAC 50/60Hz. Chassis or the enclosure of Roughneck PC's will be grounded during the installation. Units has AC to DC power supply which is IECEx approved for intended use and its certification number is IECEx SIQ 14.0004X. Both units provided with connectors for LAN and USB which were evaluated and tested as per the test requirement of IEC 60079-0 and IEC 60079-7.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- These units are intended to be used only within ambient temperature of -20°C and 50°C.
- Enclosure only suitable for IP65.
- All the connectors shall not be disconnected or connected in an atmosphere where explosive gases are present.
- All the internal connections shall be done at factory not in the field.
- Unused connectors shall be covered with caps provided with the units and shall be secured with set screw.
- Repairs and maintenance shall be performed only in non-hazardous area.
- Units shall not be exposed to direct sunlight or other ultraviolet light to avoid UV deterioration.
- The equipment shall only be used in an area not greater than pollution degree 2, as defined in IEC 60664-1.

Annex:

IECEx EXV 23.0026X Issue 0 Certificate Annex.pdf

Routine Tests:
1. Dielectric test shall be performed as per clause 7.1 of IEC 60079-7. Test shall be performed between Line-Neutral and ground with test voltage of 1500Vrms for 60sec.

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Component list	Component list	Rev 3	July 31, 2023
IECEx Label Control Drawing	1-1	2	2023-09-19
User manual Roughneck 15.6''	User manual	Issue 2	-
User manual Roughneck 22''	User manual	Issue 1	-
Roughneck 15W C1D2 Block Diagram	Roughneck 15W EX C1D2 Block Diagram	Rev 2	08/11/23
Roughneck 15W EX Dimensions	Roughneck 15W EX Dimensions	Rev 7	06/20/23
Roughneck 15W EX Ingress Dimensions	Roughneck 15W EX Ingress Dimensions	Rev 1	06/20/23
Roughneck 15W Internal Control Diagram	Roughneck 15W Internal Control Diagram	Rev 2	08/11/23
Roughneck 22 C1D2 Block Diagram	Roughneck 22 EX C1D2 Block Diagram	Rev 2	08/11/23
Roughneck 22 EX Chassis Dimensions	Roughneck 22 EX Chassis Dimensions	Rev 1	06/20/23
Roughneck 22 EX Gland Box Entry Block Diagram	Roughneck 22 EX Gland Box Entry Block Diagram	Rev 2	08/11/23
Roughneck 22 EX Gland Box Entry Chassis Dimensions	Roughneck 22 EX Gland Box Entry Chassis Dimensions	Rev 1	06/20/23
Roughneck 22 EX Ingress Dimensions	Roughneck 22 EX Ingress Dimensions	Rev 1	06/20/23
Roughneck 22 EX Internal Control Diagram	Roughneck 22 EX Internal Control Diagram	Rev2	08/11/23
Roughneck 22_15_ Set Screw	Roughneck 22_15_ Set Screw	Rev1.0	08/25/23
Roughneck 22 EX Gasket Dimensions	Roughneck 22 EX Gasket Dimensions	Rev2.0	08/25/23
Roughneck 22_15_ring material	Roughneck 22_15_ring material	Rev1.0	08/25/23
Motherboard Part Visual Inspection Report	K-U11TK V1.0A	--	01/05/2023

ExVeritas, Units 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, United Kingdom LL13 9UZ.

Title:	Drawing No.:	Rev. Level:	Date:
RAM (MEMORY) Part Visual Inspection Report	KVR32S22D8/32	--	01/05/2023
SSD Part Visual Inspection Report	MUS-INDM280ET256P	--	01/05/2023
RN22 EX Gland Box Dimensions	RN22Ex	1.7	2023-08-25
Set Screw for Connectors and Caps	Set Screw for Connectors and Caps	1.0	08/25/23
Ring Material Infomation	Ring Material Information	1	