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
Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx FMG 19.0028U**

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Status: **Current**

Issue No: 8

Certificate history:
Issue 7 (2022-06-17)
Issue 6 (2021-10-25)
Issue 5 (2021-07-27)
Issue 4 (2021-06-14)
Issue 3 (2021-02-05)
Issue 2 (2021-01-11)
Issue 1 (2020-02-05)
Issue 0 (2019-11-25)

Date of Issue: 2024-10-10

Applicant: **Nevada Nanotech Systems, Inc.**
1395 Greg Street, Suite 102
Sparks, NV 89431
United States of America

Ex Component: MPSaaa-bbccdd-ef

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Intrinsically Safe "ia"**

Marking: IECEx FMG 19.0028U

Ex ia IIC Ga Ta = -40°C to +75°C

Ex ia IIIC Da Ta = -40°C to +75°C

Approved for issue on behalf of the IECEx Certification Body: **J. E. Marquedant**

Position: **VP, Manager - Electrical Systems**

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:

FM Approvals LLC
One Technology Way
Norwood MA 02062
United States of America

FM Approvals
Member of the FM Global Group

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Certificate No.: **IECEx FMG 19.0028U**

Date of issue: 2024-10-10 Issue No: 8

Manufacturer: **Nevada Nanotech Systems, Inc.**
1395 Greg Street, Suite 102
Sparks, NV 89431
United States of America

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 component 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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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 component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

US/FMG/ExTR19.0023/00 US/FMG/ExTR19.0023/01 US/FMG/ExTR19.0023/02
US/FMG/ExTR19.0023/03 US/FMG/ExTR19.0023/04 US/FMG/ExTR19.0023/05
US/FMG/ExTR19.0023/06 US/FMG/ExTR19.0023/07 US/FMG/ExTR19.0023/08

Quality Assessment Report:

GB/FME/QAR19.0020/05

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Ex Component(s) covered by this certificate is described below:

MPSaaa-bbccdd-ef Combustible Sensor

aaa = Product Family: Any 3 alphanumeric combination
bb = Form/Size: S4
cc = Hardware Configuration: 03, 04, 05, 23, 24, 25 or 34
dd = Software Configuration: Any 2 alphanumeric combination
e = Certification: E
f = Production Classification: Any alphanumeric combination

For hardware configurations 03, 04, & 05:
Ui = 6V; Ii = 1.8A; Ci = 19.5 µF; Li = 0; Pi = 870mW.

For hardware configurations 23, 24, 25 & 34:
Ui = 6V; Ii = 1.8A; Ci = 8.3 µF; Li = 0; Pi = 870mW.

SCHEDULE OF LIMITATIONS:

1. The functionality of the sensor shall be verified as necessary in accordance with the appropriate performance standard.

2. The component shall be installed within an enclosure with a minimum ingress protection rating of IP20.

3. The intrinsically safe parameters for the sensor shall be applied to the intrinsically safe device to which the sensor is connected.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Minor revisions to printed circuit assembly of MPS S4 V1.

Addition of MPS S4 V3 version, identified in model numbering scheme as Hardware Configuration 34.