

# CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM18US0327X
- Equipment:** MK:440 Sound Monitor  
**(Type Reference and Name)**
- Name of Listing Company:** Cirrus Research PLC
- Address of Listing Company:** Acoustic House, Bridlington road  
Hunmanby, North Yorkshire YO14 0PH
- The examination and test results are recorded in confidential report number:  
PR450339 dated 8<sup>th</sup> March 2019
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:  
FM Class 3600:2018, FM Class 3611:2018, ANSI/ISA-12.12.01:2015, FM Class 3810:2018, ANSI/ISA 60079-0:2013, ANSI/UL 60079-7:2013, ANSI/ISA 60079-31:2015, ANSI/IEC 60529:2004
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- Equipment Ratings:**  
Nonincendive for Class I and II, Division 2, Groups C, D, E, F and G; AEx ec for Class I, Zone 2, AEx tc for Class II, Zone 22, Group IIB, T4 for  $-30^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$  hazardous (classified) locations; IP54 indoors and outdoors.

**Certificate issued by:**

  
\_\_\_\_\_  
J.E. Marquedant  
VP, Manager, Electrical Systems

8 March 2019  
\_\_\_\_\_  
Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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# SCHEDULE



US Certificate Of Conformity No: FM18US0327X

11. The marking of the equipment shall include:

Class I, II, Division 2, Groups C, D; T4, Ta = -30°C to +60°C;  
Class I, Zone 2 / AEx ec / IIB; T4, Ta = -30°C to +60°C;  
Class II, Zone 22 / AEx tc / IIIB; T4, Ta = -30°C to +60°C;  
IP54.  
(The label refers to User Manual #IP181AQ1.)

12. **Description of Equipment:**

**General** - The MK:440 Noise Monitor is a robust weatherproof outdoor noise monitor which converts the measured noise level to decibels and provides a standard 4-20 mA output suitable for various process systems including SCADA and DCS. The measurement range has a factory-selectable 70 dB span. The pure analogue noise monitor requires little user intervention and features an easy-to-remove rain protection windshield housing for ease of calibration.

**Construction** – Construction consists of a diecast aluminium enclosure housing the main circuit, machined brass nickel plated preamp housing the preamp circuit and acetal birdspike holding a foam acoustic windshield. Cable entry is zinc ½” NPT.

**Ratings** – 27V @40 mA.

**MK:440. Sound Monitor.**

13. **Specific Condition of Use:**

A portion of the enclosure is non-conducting and, under certain extreme conditions, may generate an ignition-capable level of electrostatic charges. The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
8 <sup>th</sup> March 2019	Original Issue.

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