




IECEX TEST REPORT COVER

ExTR Reference Number	US/FMG/ExTR13.0029/02
ExTR Free Reference Number	797-36487-283 (supplements Project ID 3048286)
Compiled by + signature (ExTL).....	Mark Bardol <i>Mark Bardol</i>
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Approved by + signature (ExCB).....	J. E. Marquedant <i>J. E. Marquedant</i>
Date of issue	<i>26 September 2014</i>
Ex Testing Laboratory (ExTL)	FM Approvals LLC
Address	1151 Boston-Providence Turnpike, Norwood, MA 02062, USA
Ex Certification Body (ExCB)	FM Approvals LLC
Address	1151 Boston-Providence Turnpike, Norwood, MA 02062, USA
Applicant's name	Sierra Instruments Inc.
Address	5 Harris Court, Building L, Monterey, CA 93940, USA
Standards associated with this ExTR package	IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-31:2008
Clauses considered	No clauses were considered to be updated as a result of this ExTR, the previous ExTR information continues to be applicable
Test procedure	IECEX System
Test Report Form Number	ExTR Cover_5 (released 2014-01)
Test item description	Insertion and In-line Thermal Mass Flowmeters
Model/type reference.....	640i and 780i
Code (e.g. Ex _ II_ T_).....	Ex d IIC T3 Gb, Ex tb IIIC T200°C Db
Rating	24 Vdc; 100-240 Vac
All testing fully performed by ExTL staff at ExTL address above:	yes
Instructions for Intended Use of ExTR Cover: <i>An ExTR Cover is the sole top-level document to associate together all other parts of an IECEx Test Report (ExTR) package. An ExTR package is comprised of an ExTR Cover and one or more associated ExTR documents (which may include Ex Test Reports, ExTR Addendums and ExTR of National Differences). All ExTR package documents are compiled and reviewed by the ExTL. The Issuing ExCB indicates final approval of the overall ExTR package on this ExTR Cover.</i>	
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Manufacturer's name.....:	Sierra Instruments Inc.
Address	5 Harris Court, Building L, Monterey, CA 93940, USA
Trademark	
Particulars: Test item vs. Test requirements	
Classification of installation and use	(portable / stationary / hand-held)
Ingress protection	IP66
Rated ambient temperature range (°C).....	-20°C to +60°C
General remarks:	
<p>The test results presented in this ExTR package relate only to the item or product tested.</p> <ul style="list-style-type: none"> ▪ "(see Attachment #)" refers to additional information appended to the ExTR package. ▪ "(see appended table)" refers to a table appended to the ExTR package. ▪ Throughout this ExTR package, a point is used as the decimal separator. ▪ <i>Where the term "N/A" appears in any part of an ExTR package, it indicates that the associated issue was considered "Not applicable" to the involved evaluation.</i> ▪ <i>In accordance with IECEx 02, a Receiving ExCB may request a sample of the Ex equipment and copies of the documentation referred to in an ExTR Cover.</i> <p>The technical content of this ExTR package shall not be reproduced except in full without the written approval of the Issuing ExCB and ExTL.</p>	
Copy of Marking Plate:	
<p>The equipment marking plate is unchanged. Refer to US/FMG/ExTR13.0029/00 for the specific marking plate details. Refer to IECEx FMG13.0031X for the certificate.</p>	
General product information:	
<p>The equipment description is unchanged. Refer to US/FMG/ExTR13.0029/00 for a complete description of the product.</p>	
Details of change (applicable only when revising an existing ExTR package):	
<p>Addition of Digital Communication Options to the Model Code.</p>	
In accordance with OD 024, testing not fully performed by ExTL staff at the above ExTL address:	
<p>N/A</p>	
National differences considered as part of this evaluation, if any:	
<p>N/A</p>	
"Specific Conditions of Use" for Ex Equipment or "Schedule of Limitations" for Ex Components, if any:	
<ol style="list-style-type: none"> 1. Consult the manufacturer if dimensional information on the flameproof joints is necessary. 2. A seal is required within 13 inches of the enclosure for probes longer than 13 inches. 	
Routine tests, if any:	
<p>N/A</p>	

Manufacturer's Documents

The identified drawing IM-640i/780i has been revised as a result of this program. The remaining four drawings were added to this report. All other drawings are unchanged and can be found in the original report: US/FMG/ExTR13.0029/00. The drawings are on file at FM Approvals, blueprint folder 3048286.

Title:	Drawing No.:	Rev. Level:	Date:
Instruction Manual	IM-640i/780i	V7.1 (was Rev v7)	
Mobi Schematic	52-0195	3.2	
PCA, MODBUS TO FF BUS CONVERT	39-1659	A	
PCA, TERM, PROFIBUS DP, 640S	52-0219	A	
MODBUS TO HART, OEM	39-1720	A	