

# **Product Alert**

August 23rd, 2019

## **Type of Notification: Product Safety Notification**

FM Approvals has been notified by LumaSense Technologies GmbH of a potential defect due to porosities involving the FM USA & Canada Approved and ATEX/ IECEx certified E2T Pulsar 4 Advanced Infra-Red Pyrometers and E2T Pulsar 4 Infra-Red Pyrometers.

Company: Address: Contact Information:	LumaSense Technology GmbH Kleyerstrasse 90, Frankfurt D-60326 Contact the local quality manager for LumaSense Technology, or email: lti-info@aei.com
Product Identity:	E <sup>2</sup> T Pulsar 4 Infra-Red Pyrometer
Models:	E <sup>2</sup> T Pulsar 4 Advanced Infra-Red Pyrometer and E <sup>2</sup> T Pulsar 4
	Infra-Red Pyrometer.
Nameplate Data:	E <sup>2</sup> T IR Pryometer – Pulsar 4 Advanced – Pulsar 4
FM Approvals Certificates:	FM16US0049, FM16CA0028, FM14ATEX0004X
IECEx Certificate:	FME 14.0001X
FM Approval Status:	FM Approved for US & Canada as explosionproof for hazardous locations, ATEX and IECEx certified as flameproof for explosive atmospheres.

**Hazard Involved:** The products contain a potential risk due to porosities that could reduce the strength of the enclosure in terms of explosion safety and may also allow water entering into the main electrical compartment if the water-cooling base section is used. See attached Product Notice issued by LumaSense Technologies GmbH, dated 15 July 2019, which describes instructions to address the porosity issue for units in the field.

If you suspect you are in possession of such products bearing the FM Approvals certification marking, please bring that to the attention of:

Antonio L. Pires FM Approvals, Quality Department Norwood, MA, USA +1 (1)781 255 4825 Email: Antonio.pires@fmapprovals.com

F 900/Rev. 0



LumaSense Technologies GmbH Kleverstr, 90 60326 Frankfurt Germany

### PRODUCT NOTICE

#### Subject: Pulsar 4 and Pulsar 4 Advanced hazardous area usage warning

To whom it may concern,

This notice is to advise the users of the Pulsar 4 and Pulsar 4 Advanced devices that it has been discovered that some of the enclosures have porosities in their casting which could reduce the strength of the enclosure in terms of explosion safety and may also allow water entering into the main electrical compartment if the water-cooling base is used.

Problem description: The investigation revealed that these porosities could have occurred where there is asymmetric pouring and uneven cooling during the casting process which cannot be visually observed during the casting process. This led to the potential cause of porosities in the bottom area of the enclosure. A new pouring concept was established and tested for symmetric pouring conditions and uniform cooling to prevent inclusions and porosities that could lead to leakages.

Corrective actions: The following corrective actions have been initiated:

- · Hydrostatic pressure testing was conducted on samples with porosities detected during production. To verify that no deforming or damaging has occurred on the enclosure that may have impact on the explosion protection.
- · All users in the market will be informed not to use the cooling option.
- In order to maintain the explosion protection, the enclosure compartments identified below needs to be closed by certified plugs. Along with this Product Notice, included are certified stopping plugs for replacement to all Pulsar 4 units.

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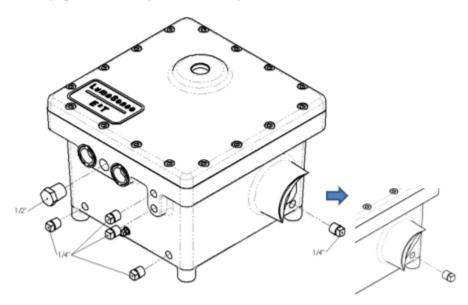


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#### Action to be taken by end users:

 Remove the existing ¼ inch and ½" stopping plugs on the product and replace them with the ATEX/IECEx rated Ex db IIC Gb ¼" NPT and ATEX/IECEx rated Ex db IIC Gb/ Class I Division I Groups A, B, C & D ½" stopping hexagon socket plugs supplied with this notice and by following the replacement instruction below.

Replacement Instructions: To ensure the certification of the internal Ex proof compartment, the indicated plugs as shown in the picture should be replaced as follows:



For the replacement of the stopping plugs please follow the requirements:

- The installation needs to be carried out by qualified Ex personnel
- No damage should occur to any thread or form during installation
- The threads need to be engaged wrench tight into the threaded hole
- A minimum of 5 threads engagement has to be maintained when tightened
- Conduct a visual check after replacing all stop plugs to ensure that no damage is on the plugs, threads or enclosure

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If additional stopping plugs are required for other units that need this modification or if there are any questions concerning this notice or questions on the use of the Pulsar 4 and Pulsar 4 Advanced units, please contact me.

Best Regards,

David Ducharme E2T Product Manager 805-217-3548 d.ducharme@lumasenseinc.com

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