



1. **EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3. EC-Type Examination Certificate Number: **ITS09ATEX26843X Issue 4**

4. Equipment or Protective System: **RFID TAGS\*\*\*\*\***

5. Manufacturer: **PVL TAG FACTORY (INDIA) PVT LIMITED**

6. Address: **W-1, Sector- 11, Noida  
District Gautam Budh Nagar, UP, INDIA**

7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8. Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.


The examination and test results are recorded in confidential Intertek Reports Ref 09043070 Issue 1 dated December 2009, G100784285 dated July 2012, G101594654 dated March 2014 and Project No G101877411.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN 60079-0:2009, EN 60079-11:2012 and EN 60079-26:2007 except in respect of those requirements referred to at item 18 of the Schedule.

10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11. This EC-Type examination certificate relates only to the design and construction of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12. The marking of the equipment or protective system shall include the following:-

 II 1G Ex ia IIC T5 Ga  
-20°C ≤ Ta ≤ +70°C



**V K Varma**  
Certification Officer  
Date: 12 November 2014

**Intertek Testing & Certification Limited**  
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13. SCHEDULE

14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX26843X Issue 4

15. Description of Equipment or Protective System

THE RFID TAG is designed for tracking assets such as LPG cylinders and other objects using RFID technology.

The RFID Tag may be a Disc Tag, a Cylinder Tag, a Flexible Laundry Tag or an Industrial Tag. The various models of the tags are as specified on drawing number Ex/001, one of which is an Industry Tag 30mm Product Code 105X1. Symbol "X" represents chip type.

The RFID Tag is a passive device and do not radiate on its own. It is activated by an external magnetic field generated by the antenna of a compatible reader through non-contact inductive coupling and then sends a response signal back to the reader.

The RFID Tag consists of a transponder containing a coil and an integrated circuit chip. The transponder is encapsulated within a plastic enclosure, which forms a free surface.

The enclosure provides a degree of protection of at least IP20 although due to its construction it is capable of providing a degree of protection of at least IP67.

The electrical parameters are:

Operating frequency  $f = 100 - 150$  kHz, 13 – 16 MHz, 840 MHz – 960 MHz

Maximum power  $P = 200$  mW

16. Report Number:

Intertek Report Ref 09043070 Issue 1 dated December 2009.

Intertek Project reference 11051182

Intertek Report Ref: G100784285 dated July 2012

Intertek Report Ref: G101594654 dated March 2014

17. CONDITIONS OF CERTIFICATION:

(a). Special Condition for safe use

The RFID Tag enclosures are plastic, which may present an electrostatic risk and hence should only be cleaned with damp cloth.

(b). Conditions For Use (Routine Tests)

None

18. Essential Health and Safety Requirements (EHSR's)

The relevant EHSR's have been identified and assessed in Intertek Report Ref 09043070 Issue 1 dated December 2009.

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- 13. SCHEDULE
- 14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX26843X Issue 4
- 19. Drawings and Documents

Number	Issue	Date	Description
Ex/001	-	28/09/09	Assembly & Schematic – Disc Tag
Ex/002	-	28/09/09	Assembly & Schematic – Cylinder Tag
Ex/003	-	28/09/09	Assembly & Schematic – Industrial Tag
Ex/004	-	28/09/09	Assembly & Schematic – Flexible Laundry Tag
Ex/005	-	28/09/09	Assembly & Schematic – M-Nano Tag
Ex/006	-	19/11/09	Marking Plate

20. **Variations**

**Issue 1 (Intertek Project reference 11051182)**

To permit the following changes:

- a) Addition of an alternate RFID Tag, Industrial Tag – 1.
- b) Addition of certification labels where the tag size is small or very small.

**Drawings**


Number	Issue	Date	Description
Ex/007	-	06/01/11	Assembly & Schematic – Industrial Tag - 1
Ex/006	01	14/01/11	Marking Plate

**Issue 2 (Intertek Report Ref: G100784285 dated July 2012)**

To permit the following changes

- a) Addition of an alternative RFID Tag, Bend-I Tag
- b) Assessment of temperature class. The Tags are now assigned temperature class T5 referred to an ambient temperature of +70°C.
- c) Assessment of the Tags to the latest standards listed below.  
 EN 60079-0:2009  
 EN 60079-11:2012  
 EN 60079-26:2007

The equipment coding is:

 II 1 G, Ex ia IIC T5 Ga  
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13. SCHEDULE

14 EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX26843X Issue 4

## DRAWINGS

Number	Issue	Date	Description
Ex/006	03	04/07/12	Marking Plate
Ex/008	00	06/06/12	Assembly & Schematic – Bend-it Tag

### Issue 3 (Intertek Report Ref G101594654 dated March 2014)

To permit the following change  
Addition of an alternative RFID Tag, M-Armada Tag, and RFID Antenna Product Code 186R1

## DRAWING

Number	Issue	Date	Description
Ex/006	04	03/03/14	Marking Plate
Ex/011	00	06/03/14	Assembly & Schematic – M-Armada Tag
EX/010	1.1	26/02/14	RFID Antenna

### Issue 4 (Intertek Project Ref G101877411)

To permit the following change:  
Change of manufacturing address from A-98, Sector- 4, Noida 201 301, District Gautam Budh Nagar, UP, INDIA to **W-1, Sector- 11, Noida, District Gautam Budh Nagar, UP, INDIA.**

*This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.*

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