



**Transmission Asset & Device ID  
Tag Specification**

**Material Specification**

Document No.: 4752.251

Originating Dept: T & S Engineering  
Standards

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**Management Approval**

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**Version History**

Version	Date	Revision Comments
1	8/26/2022	Issue for PEDC System Inspection Asset and Device ID Tag Installation
2	Feb 8, 2023	Referenced document change from 4752.250 to 4751.073



**Related/Referenced Documents**

Document Number	Document Title
4751.073	Transmission Asset Identification Standard
4752.252	ID Tag Fixing Bands, Buckles, and Tools Specification

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## **1. Introduction**

This is a general specification that covers the minimum requirements for asset and device identification tags to be used in the transmission system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site-specific conditions, quantity, and other requirements. This document includes the general mechanical characteristics of the material.

## **2. Special Requirements**

Samples shall be furnished as requested by LUMA Energy. Vendors who supplied this material to LUMA on previous orders will not have to furnish samples at bid opening. The material will be received at the LUMA's general warehouse (011) in Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

## **3. Quantity/Literature**

Vendors must supply descriptive and technical literature at the time of bidding. This literature may include (but is not limited to) details of material, drawings, documented testing, and instructions for use and installation. Failure to submit documents on time will cause bidder disqualification. For products described in this specification as requiring qualification, awards will be made only for such products that, before the time for the opening of bids, had been tested and/or approved by LUMA. Evidence of PREPA's and/or LUMA Energy's approval of the equipment or material shall be supplied by the vendor if requested by LUMA Energy.

## **4. Markings**

### **4.1. Containers**

Containers shall be marked outside with LUMA Energy's purchase order and item number.

### **4.2. Packages**

Packaging labels and tags shall be waterproof.

## **5. Equal or Approved Equal to**

1. Almetek Industries, Inc. (JUT-18676)
2. Tech Products, Inc.
3. William Frick & Company
4. Electromark, A Brady Business

## **6. Packaging**

All material and equipment shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.

## 7. Number Per Package (Logistics)

Standard package: As provided by vendor with LUMA approval or as requested by LUMA.

## 8. Acceptance Criteria

### 8.1. Tags

The tag shall be one piece with seven (7) digits. A holder with separate numbers to complete the tag will not be accepted.

### 8.2. Tests

Test required: Aluminum tags shall withstand the following, as per ANSI/ASTM (B209), and shall be certified by qualified external laboratories:

1. **Yield Strength (0.2% offset):** 32,000 PSI (220 MPA).
2. **Tensile Strength:** 39,000 PSI (220 MPA).
3. **Elongation:** 4% (minimum) in 2.00" (5.08 cm) or 4 times diameter.
4. **Bend Test:** Normal.

### 8.3. Codes, Standards, and Regulations

Latest applicable codes, standards, and other regulations: ANSI/ASTM (B209, Z535), IEEE.

## 9. Description

### 9.1. Designation

This tag is a unique, unambiguous designation for numbering and visual identification of asset and device numbers on poles and structures.

### 9.2. Tags

Co-extruded polyethylene number identification tag made of aluminum alloy (5052) with seven (7) digits (Calibri font) on it. Table 1 shows asset and device tag dimensions, colors, and letter sizes. No sharp edges exposed. Figure 1: Asset Tag Example for Poles and Structures and Figure 2: Device Tag Example for Poles and Structures below shows examples of tags with specific dimensions.

**Figure 1: Asset Tag Example for Poles and Structures**

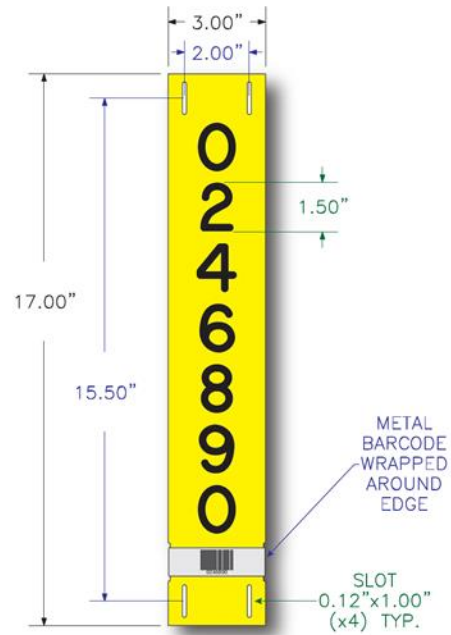
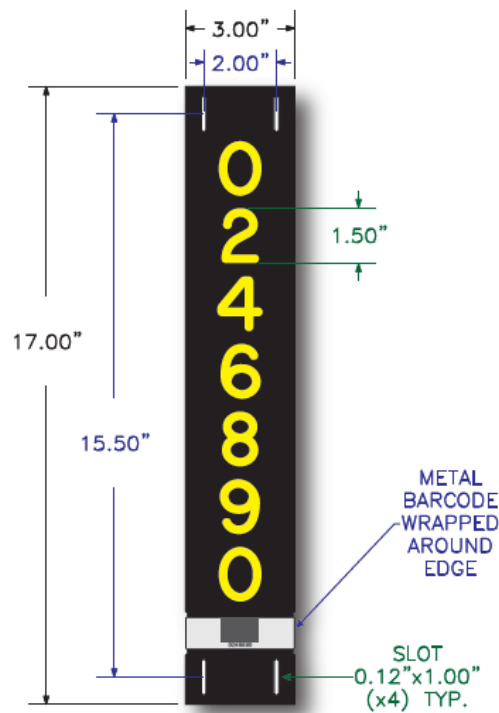


Figure 2: Device Tag Example for Poles and Structures





**9.3. Usage**

Tags of 0.025" (0.317 cm) thick each will be used vertically.

**9.4. Provisions**

The tags must have provisions on both ends to be securely fixed to a transmission structure using a stainless-steel band, measuring 0.030" thick X 0.750" wide (0.076 cm X 1.905 cm).

**9.5. Barcodes**

A barcode shall be included at the bottom of the tag but above the provision for the fixing band. This barcode shall contain the exact numbering shown in the tag and shall not be more than 1" (2.54 cm) on its shortest side.

**9.6. Numbering**

The supplier will be notified by LUMA about the exact numbering to be engraved in the tag once the purchase order is given.

**9.7. Visibility**

It shall be reflective and highly visible.

**9.8. Dimensions and Colors**

The following table shows the size and colors of asset and device tags:

**Table 1 – Tag Dimensions and Colors**

	APPROXIMATE LENGTH AND WIDTH	LETTER HEIGHT	BACKGROUND COLOR	LETTER COLOR
<b>TAG 1 ASSET ID</b>	17" X 3"	1.5"	YELLOW	BLACK
	(43.18 X 7.62) cm	(3.81) cm		
<b>TAG 2 DEVICE ID</b>	17" X 3"	1.5"	BLACK	YELLOW
	(43.18 X 7.62) cm	(3.81) cm		

**9.9. Storage**

See Table 2 below for digit placement, warehouse catalog number and Asset Suite number.

**Table 2 - Warehouse Catalog ID Information**

Asset Tag (Seven Digits)									
Digit 1 Warehouse Region	Digit 2 (0-9)	Digit 3 (0-9)	Digit 4 (0-9)	Digit 5 (0-9)	Digit 6 (0-9)	Digit 7 (0-9)	Warehouse Location	Warehouse #	Asset Suite #
1	X	X	X	X	X	X	Arecibo	002-82272	82272
2	X	X	X	X	X	X	Mayagüez	002-82273	82273
3	X	X	X	X	X	X	Ponce	002-82301	82301



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Asset Tag (Seven Digits)									
4	X	X	X	X	X	X	Caguas	002-82302	82302
5	X	X	X	X	X	X	San Juan	002-82303	82303
6	X	X	X	X	X	X	Bayamón	002-82304	82304
Device Tag (Seven Digits)									
Digit 1 (D-Device)	Digit 2 Warehouse Region	Digit 3 (0-9)	Digit 4 (0-9)	Digit 5 (0-9)	Digit 6 (0-9)	Digit 7 (0-9)	Warehouse Location	Warehouse #	Asset Suite #
D	1	X	X	X	X	X	Arecibo	002-82305	82305
D	2	X	X	X	X	X	Mayagüez	002-82306	82306
D	3	X	X	X	X	X	Ponce	002-82307	82307
D	4	X	X	X	X	X	Caguas	002-82308	82308
D	5	X	X	X	X	X	San Juan	002-82309	82309
D	6	X	X	X	X	X	Bayamón	002-82310	82310

The “X” is a number specified by LUMA for the tag manufacturer to supply. All numbers are to be unique across the entire LUMA system (Transmission; Distribution; Substations; Telecommunications; Protection, Control, and Automation).

**10. Inspection**

Accepting any material or equipment shall not relieve the vendor from his responsibility to meet this specification's requirements. It would not prevent subsequent rejection if such materials were found later to be defective.

**11. Proposal Information**

Submitted proposals must include:

1. Technical information
2. Table of Compliance completed by the bidder with reference. (See Appendix 1)

— End of Specification —



**Appendix 1: Table of Compliance**

Line	Criteria	Description	Pass/Fail (P / F)	Comments
1	Specification	The Proponent complies with the corresponding specification document (4752.251).		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document. (ANSI/ASTM)		
3	Material	<ul style="list-style-type: none"><li>• Plate: Aluminum 5052.</li><li>• Label: Reflective with clear UV protection laminate</li></ul>		
4	Product Requirements	<ul style="list-style-type: none"><li>• Plate Thickness: 0.025" min.</li><li>• Other Dimensions &amp; Color: See</li><li>• Numbering/Lettering: See Table 1</li></ul>		
5	Product Requirements	<ul style="list-style-type: none"><li>• The ID Tag will be used in a vertical way.</li><li>• Label over the aluminum plate placed on Factory.</li><li>• Shall be printed with seven (7) digits (Calibri font) on it.</li><li>• Bar-Code at the bottom of the label as section 9.5.</li><li>• Provision on both ends of the plate to be securely fixed to a transmission structure using a stainless-steel band as section 9.</li></ul>		

# 4752.251 Rev2 Transmission Asset Device ID Tag Specification

Final Audit Report

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