



## TEX 50x12

### Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2; ISO18000-63
- **Frequency** 860-960 MHz (Global);
- **IC type** (chip)<sup>1</sup> NXP UCODE 8
- **Chip memory**<sup>2</sup> 128 bits EPC; 96 bits TID
- **Read range** fixed<sup>3</sup> Up to 21.33 ft (6.50 m)
- **Read range** handheld<sup>3</sup> Up to 8.20 ft (2.50 m)
- **Polarization** Linear

### Key Features

- + **Textile:** flexible and washable
- + **100+:** commercial washing cycles
- + **Cost-effective:** for high volume
- + **Printable:** texts, patterns and barcodes

### Applications

- **Medical scrubs**
- **Hospital linens**
- **Hotel linens**
- **Uniforms**
- **Rental costumes**

### Environmental Specifications

#### Temperatures

- Operational -20°C to +110°C
- Survival -40°C to +110°C
- Washing: 90°C (194° F), 15 minutes
- Pre-drying: 180°C (356°F), 30 minutes
- Ironing: 185°C (365°F), 10 seconds
- Sterilization process: 135°C (275°F), 20 minutes

#### Chemicals<sup>4</sup>

- Standard detergents, fabric softeners, bleach, oxygen/chlorine compounds, alkali substances, acetic and peracetic acid

- **Storage humidity** 8% - 95% RH
- **Mechanical resistance** 60 bars

- **Compression strength** 35.53 psi ( 245 kPa)
- **Vibration** MIL-STD-810G
- **Warranty** 1 year

<sup>1</sup> The chip data retention is up to 50 years, based on chip operating under general environment conditions.

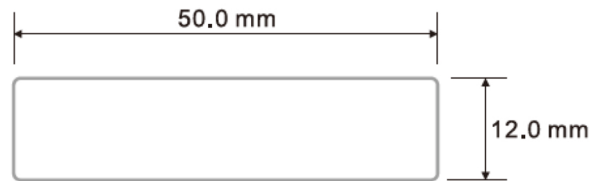
<sup>2</sup> EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.-

<sup>3</sup> Off metal, actual read range may vary based upon use case and antenna power.

<sup>4</sup> The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.

## Physical Specifications

- **Material** Textile
- **Dimensions (in)**<sup>1</sup> 1.97 x 0.47
- **Dimensions (mm)**<sup>1</sup> 50 x 12
- **Thickness (in)**<sup>1</sup> 0.03 in, 0.04 in on chip location
- **Thickness (mm)**<sup>1</sup> 0.85 mm, 1.10 mm on chip location
- **Color** White
- **Package** 1,000 pcs /bag
- **Washing method** Laundry, dry cleaning



## Mounting Systems

Sew or heat-seal based on specific requirements, with different product P/N selections

## Installation Instructions

1. Install the tag by sewing:

Sew into a hem or inside a pocket of fabric

2. Install the tag by heat-sealing:

Seal the tag onto the textile at 215°C and 0.6-0.8 MPa for 15 seconds

<sup>1</sup> Tolerance: +/- 0.02; +/- 0.50

<sup>2</sup> Tolerance: H: +/- 0.004; H: +/- 0.100

## Industry Compliance



## Order Information

TEX 50x12 (Sew): X5012-GL010-U8

TEX 50x12 (Heat-seal): X5012-GL011-U8

## Customization Options

Encoding

Laser Marking

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