TEX 50x12

Technical Specifications

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

Key Features

+ **Textile:** flexible and washable
+ **200+:** 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 +85°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

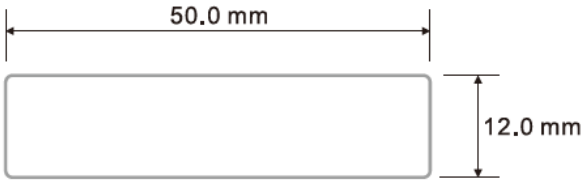
Chemicals[4]

- 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** 200 washing cycles or 3 years

[1] The chip data retention is up to 50 years, based on chip operating under general environment conditions.
[2] EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.
[3] Off metal, actual read range may vary based upon use case and antenna power.
[4] 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)**[1] 1.97 x 0.47
- **Dimensions (mm)**[1] 50 x 12
- **Thickness (in)**[1] 0.03 in, 0.04 in on chip location
- **Thickness (mm)**[1] 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

[1] Tolerance: +/- 0.02; +/- 0.50
[2] 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[1]

[1] Since the barcode reading rate isn't 100% reliable, we do not recommend laser engraving barcodes on the heat-seal version. Please select the sew version instead.

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