



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** fixed³ Up to 21.33 ft (6.50 m)
- **Read range** handheld³ 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

Chemicals⁴

- 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.

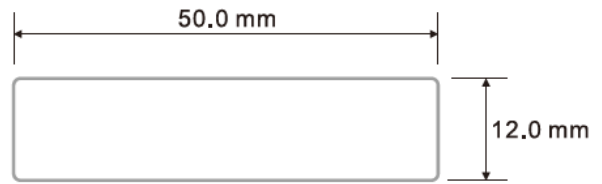
² EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.

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

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