UHF LAUNDRYCHIP™ MAT TAG

The 1st UHF LaundryChip™ designed specifically for mats.

FT401 MAT

Product info

- Patented design, specifically developed to identify mats.
- Seamlessly vulcanize into the mat during manufacturing.
- Totally imperceptible, no excess thickness.
- Zero application cost, the tag is simply positioned at the bottom of the mat during production.
- Excellent adhesion to rubber, no blister effect
- Electrically tuned for rubber, ensuring optimized single read and bulk reading performances.
- ISO 18000-6C compliant

Product Description

The patented FT401 MAT seamlessly vulcanizes with the mat during production without any preparation work required. Simply place the FT401 MAT at the mat's bottom prior to vulcanization and it will completely fuse with the rubber mat. The FT401 MAT doesn't add any unnecessary thickness and can only be removed by cutting the mat. Most importantly, since the tag is not sandwiched between layers of rubber, there is no risk of a blister effect (delamination between tag and rubber) that could weaken the mat's mechanical strength.

In addition, due to the significant difference in dielectric values between textile fibres and rubber, using a standard UHF laundry tag in a mat will result in suboptimal electrical performance, as it was specifically designed to function properly in the presence of textile fibres. This will significantly reduce the performances of the tag in both single read and bulk reading configurations. Upon contact with rubber, the FT401 MAT delivers read results that are comparable to the highest performing UHF laundry chips, making it appropriate for all UHF reading applications in a laundry environment.

UHF LAUNDRYCHIP™ MAT TAG

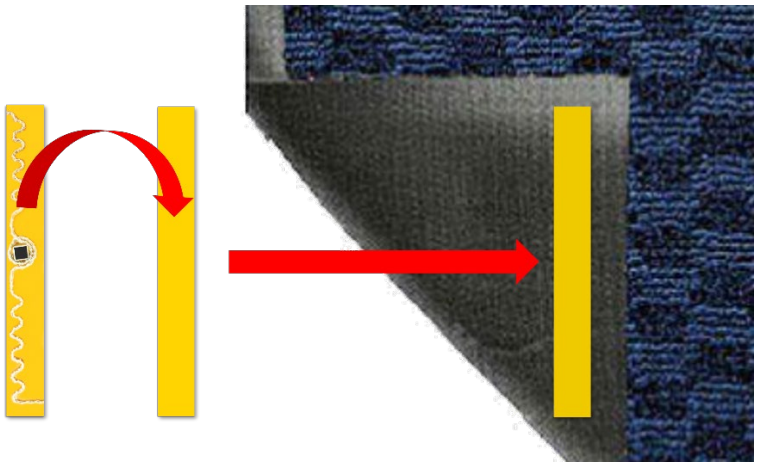
Technical data

Tag Dimensions (L x W x H)	80 x 10 x 1.5 mm
Tag Weight (approx.)	1.7 gr
Tag Material	Vinyl
Tag Warranty	First of 100 wash cycles or 3 years from ship date
Tag Memory	96 bits EPC
Data retention	min 50 years
Read Distance	Up to 6 meters (up to 19 feets)
Operating Power	Passive, operates through antenna's RF field
Operating Frequency	865 - 928 MHz
Application instructions	Position the tag at the bottom of the mat during vulcanization
Mat manufacturing conditions	165°C / 3 bar / 12 min (Typical)
Storage Temperature	-40°C to +85°C (-40°F to +185°F) in a dry environment protected from sunlight
Chemical Resistance	All Chemicals common to the washing process
Compliance	ISO/IEC 18000-6C EPC Class 1 Gen 2

Each transponder produced by Datamars is encoded with a unique 96 bits EPC following GS1 standards. The transponder code cannot be altered nor re-programmed. For customers willing to encode their own EPC, Datamars provides custom coding services or a re-programmable transponder version named FT401 UL.

Chipping Instructions

Simply place the tag under the uncured rubber during the manufacturing process. Ensure that the transparent tag side, which corresponds to the microchip side, is in direct contact with the mat rubber:



Ordering information

FT401 MAT	950 0200-457