

UHF LAUNDRYCHIP™ GAMMA RESISTANT

The 1st UHF LaundryChip™ Built to Withstand Gamma Ray Sterilization

FT501-GAM



STANDARD
100
16CX00017
CENTROCOT

Product info

- Designed for medical cleanrooms and sterile environments
- Supports over 100 cycles of Gamma ray sterilization cycles
- State-of-art Datamars UHF LaundryChip™ electrical performances
- Relies on the same industry proven mechanical components as the classic UHF LaundryChips™
- ISO 18000-6C compliant
- Certifications: **Oeko-Tex® certified**
- Available in 2 versions: source tagging (sewn) and in pouch

Product Description

Standard UHF LaundryChips™ are not suitable for processes involving Gamma ray sterilization, as exposure to Gamma radiation irreversibly damages conventional electronic components.

The Datamars FT501-GAM overcomes this limitation with a specialized semiconductor technology that ensures full immunity to Gamma radiation, making it the ideal solution for sterilization-critical applications.

Engineered with the same robustness as the rest of the Datamars UHF LaundryChip™ family, the FT501-GAM is designed to withstand the toughest industrial laundry conditions while remaining fully compatible with the existing LaundryChip portfolio.



UHF LAUNDRYCHIP™ 50I

FT50I-ST GAM / FT50I-GAM POUCH

Technical data

50I GAM Source Tagging / in Pouch

FT50I-ST GAM / FT50I-GAM in Pouch

Tag Dimensions (L x W x H)	70 x 15 x 1.8 mm
Tag Weight (approx.)	0.40 g
Tag Material	50/50 polycotton
Tag Warranty	First of 200 wash cycles or 100 sterilization 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 feet)
Operating Power	Passive, operates through antenna's RF field
Operating Frequency	865 - 928 MHz
Typical washing cycle	Washing: +90°C (194°F), 15 minutes Drying: +180°C (356°F), 3 minutes Ironer: +200°C (392°F), 12 seconds Water Extractor: 60 bar, 80 seconds
Gamma sterilization cycle	25-40 kGy per cycle
Autoclave	Air removal: +100°C (+212°F), 5 minutes, 0.1 bar Sterilizing: +134°C (+273°F), 10 minutes, 3.25 bar Drying: +45°C (+113°F), 15 minutes, 0.2 bar
Patching instructions	+204°C (399°F), 12 seconds, 0.5 kg/cm2
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
Certifications	OEKO-TEX® Standard 100 product class II

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.

Standard Tag Pouch



Material: 100% polyester
Dimensions: 27 x 80 mm; Weight: 0.45g
Up to 4 colors embroidery