

# Guardian Family

## GD23TL – ST25TV



### Overview

#### Application Area

Paragon ID GUARDIAN Family of NFC inlays are optimally designed for Brand Protection applications like identification of luxury goods, fragrances, wines and spirits. The design of the inlay and location of the IC is such that it can also be used for general purpose NFC applications. The addition of a tamper loop enables the detection of tampering done to the product it is attached to. The detection is communicated through the normal NFC interface.

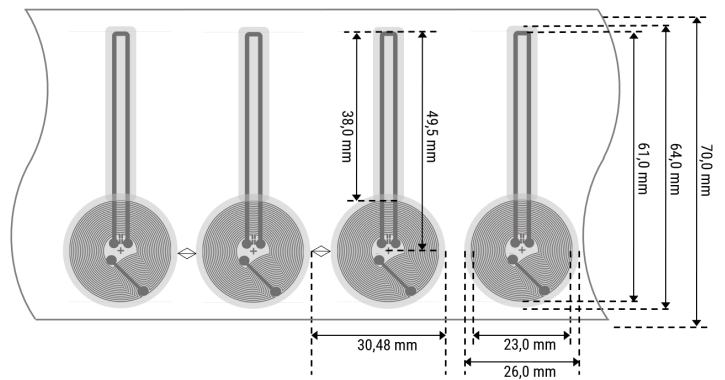
#### IC

The GD23TL–ST25TV is a high-performance NFC type 5 inlay available with the STMicroelectronics ST25TV512C and the ST25TV02KC with 512 bits and 2560 bits of memory. An additional feature of this inlay is the tamper loop, with which product tampering can be detected.

#### Paragon ID

Paragon ID is the largest EU based RFID inlay and label manufacturer with production facilities in Argent, France and Bucharest, Romania. Inlays are manufactured according to the highest quality standards

### Dimensions



### Product overview

<b>Antenna dimensions</b>	Round 23 mm diameter body with 38 mm Tamper Loop
<b>Antenna material</b>	Aluminium
<b>Operating frequency</b>	13.56 Mhz
<b>IC</b>	ST Microelectronics ST25TV512C, ST25TV02KC
<b>International standards</b>	NFC type 5, ISO15693
<b>Memory</b>	ST25TV512C: 512 bits ST25TV02KC: 2K bits
<b>Security</b>	Digital Signature (TruST25)
<b>Other features</b>	Tamper loop Kill and untraceable mode for privacy Write protection by password EAS capability

# Guardian Family

## GD23TL – ST25TV



### Inlay specifications

<b>Antenna size</b>	Round 23 mm / 0.63 in with 38 mm tamper loop
<b>Die-cut</b>	Round 26 mm / 0.71 in Length: 61 mm / 2.40 in (incl tamper loop)
<b>Substrate</b>	PET 50 µm
<b>Antenna</b>	Aluminium 15µm
<b>Adhesive</b>	Acrylic, permanent
<b>Backing</b>	Silicon paper
<b>Minimum Yield</b>	98% or higher, 2 splices or less per roll
<b>Quality assurance</b>	100 % tested
<b>Marking</b>	Failed units marked
<b>Delivery Details</b>	10 000 functional inlays/roll, 76 mm (3 in) core

### IC specifications

<b>Model and Memory</b>	ST25TV512C, 512 bits ST25TV02KC, 2048 bits
<b>Standards</b>	NFC type 5 ISO/IEC 15693
<b>Identifier</b>	64 bits, unique
<b>Operating Temperature</b>	-40°C up to +85°C -40°F up to +185°F
<b>Data Retention</b>	60 years at +55°C
<b>Write Cycles</b>	Minimum 100,000

### Delivery information

	Delivery Format		
	DRY Inlay	WET Inlay	Label
<b>Chip</b>	ST25TV512C   ST25TV02KC	ST25TV512C   ST25TV02KC	ST25TV512C   ST25TV02KC
<b>Antenna size</b>	Round 23 mm / 0.91 in with 38 mm tamper loop	Round 23 mm / 0.91 in with 38 mm tamper loop	Round 23 mm / 0.91 in with 38 mm tamper loop
<b>Die-cut size</b>	N/A	26 x 64 mm (die cut 1.5 mm around the antenna) / 1.02 x 2.52 in	26 x 64 mm (die cut 1.5 mm around the antenna) / 1.02 x 2.52 in
<b>Standard Pitch</b>	30,58 mm / 1.20 in	30,58 mm / 1.20 in	30,58 mm / 1.20 in
<b>Web width</b>	64.0 mm / 2.52 in	70.0 mm / 2.76 in	70.0 mm / 2.76 in
<b>Core inner diameter</b>	76 mm / 3.0 in	76 mm / 3.0 in	76 mm / 3.0 in
<b>Quantity per roll</b>	10,000	10.000	10.000



To ensure this product meets application requirements, this product should be tested under conditions appropriate to the application. Paragon ID does not warrant that this product is fit for any particular use or purpose. The information provided in this datasheet is believed to be reliable to our current experience and knowledge, no rights however can be derived from the information provided in this datasheet. Paragon ID reserves the right to change or discontinue product offerings at any time without notice.