



## Inlay Layout and Dimensions

	IN503	IN513
Antenna width	45 mm ± 0.2 mm (1.77 ± 0.01 in)	45 mm ± 0.2 mm (1.77 ± 0.01 in)
Antenna length	76 mm ± 0.2 mm (2.99 ± 0.01 in)	76 mm ± 0.2 mm (2.99 ± 0.01 in)
Lengthwise pitch	79 mm ± 0.2 mm (3.11 ± 0.01 in)	96 mm ± 0.2 mm (3.78 ± 0.01 in)
Web width	48 mm ± 0.2 mm (1.89 ± 0.01 in)	48 mm ± 0.2 mm (1.89 ± 0.01 in)

## Inlay Composition

Composition	Material	Thickness* [µm]
Top	Aluminium	30
Support	Polyester PET	38
Bottom	Aluminium	10 ÷ 20

\* Overall thickness depends on the IC. For IC thickness please refer to the "Available ICs" table

## Available ICs

	NXP ICODE SL2 ICS20	NXP ICODE SLI-S ICS53	NXP ICODE SLI-L ICS50	TI HF-I STD/PRO	ST LRI2K*
Product code	IN503-PSL2 IN513-PSL2	IN503-PSSS IN513-PSSS	IN503-PSLL IN513-PSLL	IN503-TISD IN513-TISD	- IN513-LR2K
Operating frequency	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz
Standard compliance	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3	ISO 15693 ISO 18000-3
Thickness	150µm ± 15µm	150µm ± 15µm	150µm ± 15µm	150µm ± 15µm	180µm ± 15µm
Operating temperature	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C	-25°C to +70°C	-20°C to +85°C
Storage temperature	-55°C to +140°C	-55°C to +140°C	-55°C to +140°C	-40°C to +85°C	n/a
Unique serial number	8 bytes	8 bytes	8 bytes	8 bytes	8 bytes
Memory size	1024 bits	2048 bits	512 bits	256 bits	2048 bits
Memory organization	32 blocks of 4 bytes	16 pages with 4 blocks of 4 bytes	16 blocks of 4 bytes	8 blocks of 4 bytes	64 blocks of 4 bytes
Write endurance	10 years	10 years	10 years	10 years	40 years
Data retention	100 000 cycles	100 000 cycles	100 000 cycles	100 000 cycles	1 000 000 cycles

Other ICs are available for this antenna (ST, Infineon, Innovision): please contact us for further information

(\*) LRI2K available only for IN513 layout

## General supply conditions

Reel dimensions	Internal diameter	76 mm
	External diameter	300 mm
Reel quantity	Inlay per reel	8 000 ± 10% (custom sizes available upon request)