



Note: IN500 and IN500B are the same product with different lengthwise pitch

Inlay Layout and Dimensions

	IN500B	IN500
Antenna width	46 mm ± 0.2 mm (1.81 ± 0.01 in)	46 mm ± 0.2 mm (1.81 ± 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)	91 mm ± 0.2 mm (3.58 ± 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 Mifare Ultralight	NXP Mifare Ultralight C	NXP Mifare Ultralight Ev1 (80 byte)	NXP Mifare Ultralight Ev1 (164 byte)	NXP Mifare1K	NXP Mifare4K
Product code	IN500-PMF2 IN500B-PMF2	IN500-PMFUC IN500B-PMFUC	IN500-MFU1 IN500B-MFU1	IN500-MFU2 IN500B-MFU2	IN500-MF1K4 IN500B-MF1K4	IN500-MF4K4 IN500B-MF4K4
Operating freq.	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz	13.56 MHz
RF Standard	ISO 14443 A (up to level 3)	ISO 14443 A (up to level 3)	ISO 14443 A (up to level 3)	ISO 14443 A (up to level 3)	ISO 14443 A (up to level 3)	ISO 14443 A (up to level 3)
Thickness	120µm ± 15µm	120µm ± 15µm	120µm ± 15µm	120µm ± 15µm	150µm ± 15µm	150µm ± 15µm
Operating temp.	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
Storage temp.	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C	-55°C to +125°C
UID	7 bytes	7 bytes	7 bytes	7 bytes	4 bytes (MF1K7: 7 bytes)	4 bytes (MF4K7: 7 bytes)
Memory size	64 bytes	192 bytes	80 bytes	164 bytes	1024 bytes	4096 bytes
Memory organization	16 pages of 4 bytes	48 pages of 4 bytes	20 pages of 4 bytes	41 pages of 4 bytes	16 sectors of 64 bytes	32 sectors of 64 bytes + 8 sectors of 256 bytes
Write endurance	5 years	5 years	10 years	10 years	10 years	10 years
Data retention	10 000 cycles	10 000 cycles	100 000 cycles	100 000 cycles	100 000 cycles	100 000 cycles

Other ICs are available for this antenna (Mifare Plus, DESFire and Infineon SLER66 families): please contact us for further information

General supply conditions

Reel dimensions	Internal diameter	76 mm
	External diameter	300 mm
Reel quantity	Inlay per reel	8000 ± 10% (custom sizes available upon request)