

Prelaminated Inlays

Key Applications

- Access control
- School and campus
- Transit applications
- Loyalty programs
- Events



Wave Source LLC's pre-laminated inlays are designed to simplify card production while delivering exceptional finished products. These inlays are engineered to comply with ISO standard card production and offer robustness, material stability, and optimized read and write performance. Moreover, they boast superior bending and pressure characteristics, ensuring a completely flat finish that provides numerous benefits to card manufacturers.

Our RFID pre-laminated inlays are of the highest quality and tailored to your specific manufacturing needs. We use PVC, PET, PET-G, and PC materials in sheet sizes that can accommodate your specific step-and-repeat requirements. The pre-laminated inlays come with a range of antenna designs available in different shapes, bonding methods, and frequency combinations. We also offer true-flat pre-laminated inlays in various thickness options to ensure lamination stability and reduce waste.

We support chip technologies required for your pre-laminated inlay design. From low-frequency proximity technology such as Microchip and EM, to high-frequency technology manufacturers NXP, Infineon, STMicroelectronics, plus more. We provide a range of custom orderable sheet dimensions and thicknesses to ensure that the pre-laminated inlays are tailored to your specific design specifications. Above all, our flexibility to work with your design requirements delivers RFID solutions for your application.



Chip Technology	Microchip ATA5577	NXP MIFARE® Classic® EV1 1Kbyte	NXP MIFARE® DESFire® EV1 4Kbyte
Base Part No.	WSP-1000 (PVC)	WSP-2011K0 (PVC)	WSP-2024K0 (PVC)
	WSP-1500 (PET)	WSP-2511K0 (PET)	WSP-2524K0 (PET)
Operating Frequency	125 kHz	13.56 MHz	13.56 MHz
RF Interface	ISO 7810	ISO 14443 Type A	
Read Range	1"-3" Typical; Dependent upon antenna design and chip technology		
Memory	EEPROM size 363-bit Factory Programmed	EEPROM size [byte] 1024 Write Endurance [cycles] up to 200,000 Data Retention [yrs] 10	EEPROM size [byte] 4096 Write Endurance [cycles] up to 200,000 Data Retention [yrs] 10
	Material Polyvinyl chloride (PVC); Polyethylene terephthalate (PET); Polyethylene terephthalate glycol (PET-G); Polycarbonate (PC)		
Operating Specs	Operating Temperatures: 25°C ~ +55°C Storage temperature: -25°C ~ +65°C Humidity: 5% - 95% Non-Condensing		
Other Chip Types	NXP: Mifare® Ultralight®; Mifare® Ultralight-C®; Mifare® Plus® EV2; Mifare® DESFire® EV2 and EV3 Infineon: Calypso® Products; NRG™ SLE66R35x STMicroelectronics – ST25T; ST25D		
Options	Antenna Material – Wound CU Coil, AL Etch, Wire Embed Bonding Method – Wire Bonding, FLIP Chip, MOA4, MOA8, Others Per Design Inlay Size and Step-And-Repeat Per Design		
Warranty	1 Year Prior to Lamination Process – See Terms and Conditions for complete details		