



**LINXENS**

CONNECTING YOU TO SUCCESS

**PRELAM®**

High on Functionality and Choice



LINXENS's PRELAM® provides card manufacturers with a durable and convenient solution for the manufacture of finished cards. PRELAM® stands for pre-laminated. This means fusing together single layers under pressure and high temperature in special lamination press machinery after the electronic parts have been embedded into the carrier material and assembled.

The fusing together of the different layers of thermoplastic material into one homogeneous sheet, seals the transponder hermetically. This pre-laminated or PRELAM® structure is ideal for making pre-printed cards with many security features using standard card production processes.

The low frequency PRELAM® incorporates an air wound coil, whilst the high frequency PRELAM® is manufactured based on LINXENS's patented wire embedding technology. It is a multi-layered construction and is available in materials such as PVC, PC, PET-G or Teslin®.

Other variables like the size and the shape of the antenna can be adapted to the specific requirements of the customer. Customers can also select different sheet formats or other customized layouts. To facilitate card production, the LINXENS PRELAM® sheets come with trimmed reference edges and optional printed cross marks and registration holes.

Benefits of the LINXENS PRELAM® include durability and the ability to testify excellent electrical performance. Compliant with all of the various ISO standards it is particularly suited for contactless card applications such as automated fare collection, access control, and contactless payment.

#### Overview

##### Operating Frequency

125 kHz  
13.56 MHz  
860-960 MHz

##### Operating Temperature

-25°C to +50°C

##### Material

PVC, PC, PET-G, Teslin®

#### International Standards

- ISO 14443
- ISO 15693
- ISO 18000-6C

#### Application Area

- Access Control
- Automated Fare Collection
- Contactless Payment
- Hospitality, Leisure & Entertainment

#### Options

- Initialization / customized programming of data



# PRELAM®

## High on Functionality and Choice

Operating Frequency	Dimensions	Thickness*	Operating Temperature	Available IC
125 kHz	From 3 x 6 up Max. 580 x 705 mm	400 µm ± 30 µm	-25°C to +50°C	Atmel EM Marin EM Marin NXP
13.56 MHz	From 3 x 6 up Max. 580 x 705 mm	400 µm ± 30 µm	-25°C to +50°C	Infineon Inside Legic NXP Samsung Sony STMicroelectronics
860 - 960 MHz	From 3 x 6 up Max. 580 x 705 mm	400 µm ± 30 µm	-25°C to +50°C	Impinj NXP

Other thicknesses are available upon request.  
Other chip types are available upon request.