



### Overview

Operating frequency	860 MHz – 960 MHz
Chip	NXP UCODE DNA or NXP UCODE 7, both passive-backscatter (battery-free)
Supported protocols	RAIN RFID (ISO/IEC 18000-63 respectively GS1 EPC UHF Gen2v2)

		UCODE DNA	UCODE 7
Memory capacity	TID	Both, 96-bit factory-locked (incl. 48-bit unique serial number)	
	UUI/EPC length	224 bit	128 bit
	User	3072 bit	NA
Typical read range <sup>1</sup>	ETSI regions (2 W ERP at 866 MHz)	12 m on glass	15 m on glass
	FCC regions (4 W EIRP at 915 MHz)	11 m on glass	13 m on glass

### Security features

The IDeSTIX® easy is an innovative tamper-proof label combining various security features

Mechanical security features	Transparent selective release film (VOID) with (partial) holographic image
	Pressure sensitive adhesive is intended for a single use and permanent application. Any attempt of removing and reapplying of the label results in visual damage
RFID-based security features	32-bit kill password and 32-bit access password
	Various 'memory lock' options
Only NXP UCODE DNA	2 × 128 bit AES keys for cryptographic security features <ul style="list-style-type: none"> <li>key0 for security: dynamic cryptographic tag authentication to verify the vehicles identity and to prove its origin, as well as to prevent counterfeiting</li> <li>key1 (group key) for privacy: untraceable function to restrict access privileges and hide (custom) data, which can be obtained only based on decryption of enciphered tag</li> </ul>

### Environmental resistance

Chip operating temperature <sup>2</sup>	-40 °C to + 85 °C
Data retention on chip <sup>3</sup>	20 years
Adhesive	High adhesive strength to withstand all weather conditions and typical vehicle cleansing
Direct sunlight	Black spot UV protection print on chip position to protect against sunlight transmission

<sup>1</sup> Read ranges are laboratory values and therefore are indicative only. These values are calculated on basis of measurements in a non-reflective environment. Read ranges may vary depending on used frequency, radiated power, reader sensitivity, antenna polarisation and gain, directivity of the antennas as well as environmental conditions.

<sup>2</sup> Ambient temperature may have an influence on the maximum read range

<sup>3</sup> If the ambient temperature is ≤ 55 °C



### Application

Self-adhesive IDeSTIX® easy is applied to the inside of a vehicle's windscreen as a third license plate for electronic vehicle identification. IDeSTIX® easy is the perfect supplement to the IDePLATE®, the RFID-based aluminium license plate.

### Personalisation options

	Z-fold label	Mono label
Print	Folding mechanism for personalisation using thermal transfer printers and to ensure printed information is sealed between the layers of the label	Blank label or pre-printed label (black & white static or consecutive numbering as plain text and/or 2D barcode symbology)
Colours	Front side (facing windscreen): up to 5 colours Back side (facing driver): 1 colour	Up to 5 colours
Overall label size	100 mm × 50 mm	100 mm × 50 mm or 100 mm × 25 mm
Hologram	Custom-specific holographic image	
Printing on the liner	Static printed application instructions on backside	
Chip pre-programming	Pre-programming of the chip is optional per agreement	