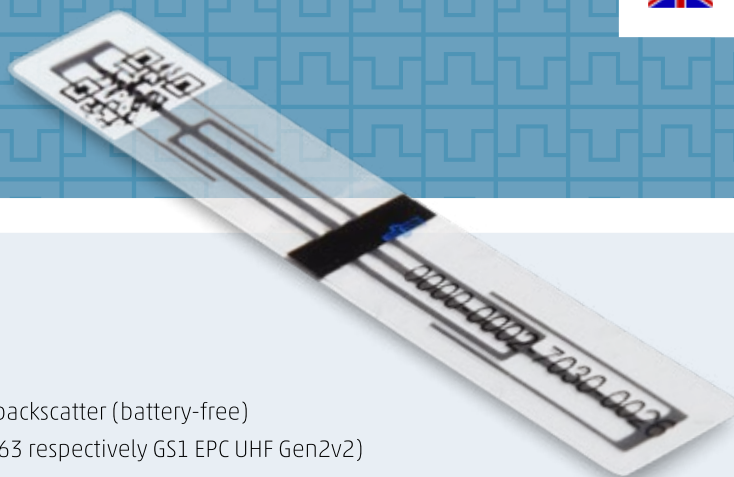


IDeSTIX® Headlamp Tag



Overview

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

Memory capacity	TID	96-bit factory-locked (incl. 48-bit unique serial number)
	UII / EPC length	224 bit
	User	3072 bit
Typical read range ¹	ETSI regions (2 W ERP at 866 MHz)	9 m on glass and > 20 m on headlamps possible
	FCC regions (4 W EIRP at 915 MHz)	5 m on glass and > 20 m on headlamps possible

Standard security features

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

Mechanical security features	Transparent selective release film (VOID) with (partial) holographic image
	Fragile RFID antenna design in order to prevent removal or reuse
	Pressure sensitive adhesive is intended for a single use and permanent application Any attempt of removing and reapplying of the label results in visual and functional damage
RFID-based security features	32-bit kill password and 32-bit access password
	Various 'memory lock' options
	2 × 128 bit AES keys for cryptographic security features <ul style="list-style-type: none"> ▪ key0 for security: dynamic cryptographic tag authentication to verify the motorcycle's identity and to prove its origin, as well as to prevent counterfeiting ▪ 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

Environmental resistance

Chip operating temperature ²	–40 °C to + 85 °C
Data retention on chip ³	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

¹ 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.

² Ambient temperature may have an influence on the maximum read range

³ If the ambient temperature is ≤ 55 °C



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Application

Self-adhesive and mostly transparent designed IDeSTIX® Headlamp Tag is applied to the outside of motorcycle's headlamps as contactless electronic vehicle identification. IDeSTIX® Headlamp Tag is the perfect solution to identify motorcycles from the front. To identify motorcycles from the rear, the usage of IDePLATE® is recommended.

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)
Overall label size	100 mm × 20 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	