

### Kapsch TrafficCom

## **TRP-8611 series.** *UHF RFID Passive Headlamp Tag.*

**The Headlamp Tag is specially designed for use on a vehicle headlamp. It is perfect for motorcycles, scooters, and hard-to-tag vehicles.**

With its high performance and high security features, the Headlamp tag delivers superior read and write performance and provides great flexibility on hard-to-tag vehicles, such as motorcycles and vehicles with windshields containing metallic material and/or films that can affect radio transponders.

When applied properly, the tag is barely noticeable and has no negative effect on the performance of a headlamp. It is constructed to provide reliable reading for years, even in extreme weather and driving environments. Designed as a vehicle tag, only outdoor and automotive application-grade materials are used in its manufacture.

The Headlamp Tag uses a chip that has a flexible memory architecture and provides for optimum allocation of EPC and user memory. It is ideal for use in

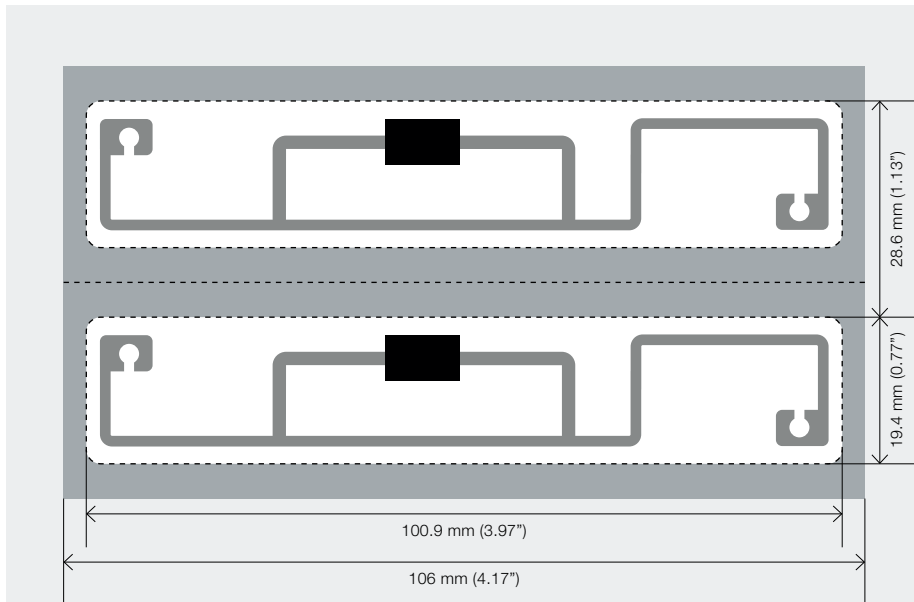


high-performance and security applications such as Electronic Toll Collection (ETC), Electronic Vehicle Registration (EVR), Secure Parking and Access Control, Fleet Management, and other critical vehicle tracking applications.

User memory may also be secured by the chip's read-lock and write-lock features, allowing the tag to support a variety of public/private usage models. The chip also features a factory pre-programmed

and permanently locked 64-bit serial number that cannot be altered.

Kapsch Headlamp Tags are available with features such as Non-Removeable Non-Transferable (NRNT) and Tamper Evident Feature, IR and UV Light Protection Filter, Customer Press or Variable Printing, and Custom Chip Programming. Optional custom packaging and tag sizes are also available.



#### Applications:

- > Electronic Toll Collection
- > Electronic Vehicle Registration
- > Parking and Access Control
- > Vehicle Emissions Inspection
- > Fleet Management
- > Proof of Insurance

#### Features:

- > Specially designed for headlamp glass
- > ISO 18000-63 (6C) / EPC C1G2
- > Great Read Performance
- > UHF band 860-960 MHz

## Technical Specifications.

### Physical Specifications

- > Measurements (W x H): <sup>(1)</sup>  
100.9mm x 19.4mm  
3.97" x 0.77"
- > Pitch Between Tags: 28.6mm (1.13")
- > Inlay Substrate: Special PET (non-shrink)
- > Antenna Material: Silver Conductive Ink
- > Release Liner Material: Clear Polyester/Paper
- > Adhesive: Clear Permanent Adhesive
- > Quantity per roll: 2,500 pieces
- > Roll Core size:  
76.2mm x 110.0mm  
3.00" x 4.33"
- > Custom Printing on Facestock: Optional
- > Custom Printed Release Liner: Optional

### Communication

- > Operating Mode: Passive
- > RF Protocol:  
ISO 18000-63 (6C)  
EPC C1G2
- > Functionality: Read/Write
- > Data Transfer Rate: Up to 640 kbps
- > Operating Frequency: 860-960 MHz

### Environmental Specifications

- > ESD - HBM/CDM: ±3kV
- > Operating Temperature (Installed):  
-50 °C to +85 °C  
-58 °F to +185 °F
- > Relative Humidity (RH) (Installed):  
100 % Condensing Humidity
- > Storage Temperature:  
-40 °C to +100 °C  
-40 °F to +212 °F

### Memory & RF Security

- > Chip Type: Alien HIGGS 3
- > EPC: 96-480 Bits
- > On-Chip Memory: 800 Bits
- > Unique TID: 64 Bits
- > Access Password: 32 Bits
- > Kill Password: 32 Bits
- > EEPROM Data Retention: 15 Years
- > EEPROM Write Endurance: 100,000 cycles
- > Custom TID Bitmask: Optional <sup>(2)</sup>
- > Password Authentication: Yes

<sup>(1)</sup> Custom tag sizes are available upon request.

<sup>(2)</sup> Other chip types are available upon request