

TDM Transponder

J1 and J1S

TransCore's TDM Transponder is a 915-MHz battery powered radio frequency identification (RFID) tag. It is ideal for high-speed, high-reliability applications.

The J1 and J1S TDM transponders work for basic IAG operations and include capability to detect and prevent transponder tampering, cloning, and spoofing. The J1S uses TransCore authentication for added security to effectively validate the transponder and its transactions.

The TDM Transponder's case is constructed of highly durable, impact resistant, molded plastic. The non-replaceable internal battery provides years of maintenance-free service.

The TDM Transponder is designed for mounting to a vehicle's interior windshield with hook-and-loop or 3M™ Dual Lock™ fastener strips.

Other customizable options include printing on the case, molded insert on the front of the case, custom case colors, and laser-etching.



Features

- ▶ High speed, high performance reading and writing
- ▶ Capability to detect and prevent transponder tampering, cloning, and spoofing
- ▶ Option of basic IAG operations or TransCore authentication for added security for each toll transaction
- ▶ Non-replaceable internal battery with a 10-year design life
- ▶ Mounts to interior windshield with hook-and-loop or 3M™ Dual Lock™ fastener strips
- ▶ Impact resistant, molded plastic case available in six colors: blue, white, yellow, green, orange, and gray
- ▶ Custom printing available on front and back of case

Applications

- ▶ Electronic toll collection
- ▶ Traffic management

TDM Transponder

COMMUNICATIONS

Transmit Frequency Range

915 MHz (nominal center)

Trigger/Receive Frequency

915.75 MHz (nominal center)

Polarization

Linear, horizontal

SOFTWARE FEATURES

Data Memory

256 bits

IAG-TDM:

Data Rate

500 kb/s Manchester

Data Format

Manchester keyed carrier

Error Checking

16-bit cyclic redundancy check (CRC)

POWER

Power Source

Internal lithium battery

LIFE EXPECTANCY

Service Life

10-year design life

PHYSICAL CHARACTERISTICS

Weight

1.75 oz. (49.61 g)

Dimensions

4.35 x 1.42 x 0.56 in (11.05 x 3.61 x 0.42 cm)

Color

Six colors: white, blue, orange, yellow, green, and gray

Case

Plastic cases are UV stable and are not affected by temperature extremes or severe conditions typical of this operating environment. Shock and vibration resistant.

Mounting Surface

Interior: Non-metallic windshield

Mounting Method

Hook-and-loop or 3M™ Dual Lock™ fastener strips

ENVIRONMENTAL

Operating Temperature

-40°F to +185°F (-40°C to +85°C)

Humidity

100% condensing

REGULATORY

Complies with Part 15 of the FCC rules

J1 Tag FCC ID: FIH051064B

J1 Secure Tag FCC ID: FIH051064S

COMPATIBILITY

TDM

MODEL PART NUMBERS

13-7800-NNN J1

13-7810-NNN J1S

For more information:

Sales Support

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Technical Support

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[transcore.com](https://www.transcore.com)

