

TDM Transponder

J1 and J1S Switchable

TransCore's Switchable TDM Transponder is a 915-MHz battery-powered radio frequency identification (RFID) transponder that offers the flexibility of switching between two selectable configurations. It is ideal for high-speed, high-reliability applications.

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

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

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

The two-position switch can be configured to identify different tolling configurations as determined by the issuing agency. An audio indicator beeps when the switch is moved from position 1 to position 2.

Other customizable options include printing on the case, molded insert on the front of the case, a choice of 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
- ▶ Two-position switch with audio indicator, configurable by the issuing agency
- ▶ Non-replaceable internal battery with a 7.5-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
- ▶ HOV/HOT

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Switchable 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
7.5-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

Audio Indicator
J1 and J1S tags provide an audio indication to the driver when the switch is moved from position 1 to position 2.

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

13-7801-NNN J1-Flex
13-7811-NNN J1S-Flex

For more information:

Sales Support
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Technical Support
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