

MARKIV

REINVENTING THE ROAD®

BADGER READER

The Rugged Industry Benchmark For Open-Road Applications

Overview

MARK IV's Badger Reader is the rugged industry benchmark for multi-lane monitoring in high-speed open-road applications. The Badger Reader establishes high-speed communication between vehicle-mounted transponders and the host roadside, achieving improved transponder acquisition capability in higher vehicle speed environments. This improves transaction capture performance - with greater accuracy and reliability – in multi-lane environments.

Scalability

The Badger Reader is available in both single and redundant configurations, and can simultaneously monitor up to eight lanes of traffic using multiplexed antennas. It is compatible with IAG FPT, LPT, IAG-mode Fusion® Transponders and Janus Transponders. The redundant configuration of the Badger Reader is a Master Slave for fail-safe operations.

Key Benefits

- ❖ Provides accurate, reliable monitoring of up to eight lanes in highway-speed, open-road environments
- ❖ Improves transponder acquisition capability in high-speed vehicle environments
- ❖ Improves capture performance in high-speed, multi-lane environments
- ❖ Cyclical Redundancy Checksums and built-in test routines ensure high transaction accuracy and reliability
- ❖ Increased reliability with redundant configuration
- ❖ Fully automatic and unattended operation



BADGER READER

Technical Specifications

Height	20.95" (532 mm)
Width	19.00" (483 mm)
Depth	12.85" (326mm)
Weight	68 lbs.
Frequency	915.75 MHz (nominal center using FCC RF Module)
Error Checking	16-bit Cyclic Redundancy Check (CRC)
Power Density	Less than 4 mW/sq. cm per ANSI C95-1
Operating Temperature Range	-40 deg C to +70 deg C; 5% to 90% relative humidity (non-condensing)
Data Rate	500 kbps \pm 10%
Maximum Cabling Distance (Reader to IAG Flat-Panel antenna)	200 ft. using Crushcraft Signals Ultralink cable. Consult factory for longer cabling distance configurations
Interfaces	RS-232-C interface. Up to 56K asynchronous. Optional RS-422-A interface. Handshake protocol required. Each master and slave reader unit features up to 8 serial ports, plus Host Port and Diagnostic Port. Sync cable connection.
Power Input Requirements	140W @110 VAC (fully loaded dual redundant reader)