

OVERHEAD LANE KIT

Precise Capture Zone Definition

Overview

Lane Kits provide the RF connection between readers and transponders. They are supplied separately for each lane to be equipped. Lane Kits can have different types of antenna, depending upon the application (for example: IAG-1, IAG-2, VRC, etc.). This cut sheet describes the IAG-1 antenna used in regular toll lanes up to 12 feet wide. The high performance of MARK IV's roadside equipment relies upon MARK IV's Overhead Lane Kit. The package consists of an FCC approved RF module, fully weatherized flat-panel antenna and adapter cable, all of which contribute to precise capture-zone definition for channelized toll lanes and excellent lane discrimination. The lane-based capture zone is defined by RF emitted via the flat-panel antenna. Transponders passing through the capture zone transmit their information packets to the overhead antenna.

Installation Specifications

The antenna is installed on a suitable overhead structure (MARK IV can provide optional mounting brackets). Typical antenna height for channeled toll lane applications is 15 feet, tilted slightly toward the flow of traffic. The maximum cabling distance between the RF Module and flat-panel antenna is typically up to 200 feet. Consult the factory for cabling distance configurations and corresponding cable specifications.

ITS Applications

The MARK IV Overhead Lane Kit is suitable for Intelligent Transportation System (ITS) applications employing both internally and externally mounted transponders.



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Technical Specifications

IAG1 - ANTENNA

Housing	Flat panel, fully weatherized, salt resistant, corrosion-proof housing. Front face, white hermetically sealed fiberglass radome with UV protection
Dimensions (WxHxD)	~31.75 x 34.8 x 2.3 in. ~80.77 x 88.39 x 5.84 cm
Weight	~28 lbs. ~12.70 kg
Operating Temperature Range	-40° C to +85° C -40° F to +185° F
Additional Available Hardware	RF adapter cable, extension cables. Consult factory for details

IAG2 - ANTENNA

Housing	Flat panel, fully weatherized, salt resistant, corrosion-proof housing. Front face, white hermetically sealed fiberglass radome with UV protection
Dimensions (WxHxD)	~15.47 x 17.72 x 1.2 in. ~39.37 x 44.96 x 3.05 cm
Weight	~4 lbs. ~1.81 kg
Operating Temperature Range	-40° C to +85° C -40° F to +185° F
Additional Available Hardware	RF adapter cable, extension cables. Consult factory for details



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