

SkyLink - Low Profile Through Glass V2X Antenna*

The SkyLink Low Profile V2X Antenna is driving the future of vehicle-to-everything technology. Danlaw's innovative V2X antenna collects real-time driving information from other vehicles and roadside units using DSRC. This device is creating safer roads by providing drivers with access to enhanced route information, critical alerts, and safety advice.

Features

Dual-radio roof mounted shark fin antenna with glass coupling to pass V2X RF from interior to exterior. This eliminates the need to pass RF cables through roof or window opening (i.e. due to sealing, aesthetics and cable losses)

Over molded RF cable connection from roof mounted shark fin antenna to glass mounted exterior coupler

Integrated GNSS antenna on interior coupler

Two versions to mount on rear or front of the roof and glass with standard VHB and glass adhesives



Benefits

Best in class RF performance (omni-directional & high gain)

Simplifies antenna installation on existing vehicle

Eliminates the need to drill holes in vehicle or run lengthy RF cables to exterior

Excellent GNSS reception with unobstructed sky view

Superior Adaptability

Danlaw's SkyLink Low Profile V2X Antenna is a dual-radio, roof-mounted antenna with glass-mounted coupling pair, which passes V2X RF signals from the interior to the exterior of the vehicle. It can be mounted to the front or rear of the roof and glass.

Easy Installation

The through glass coupler simplifies antenna installation, eliminating the need to drill holes through the vehicle or pass cables through a window. The low profile antenna and external coupler are built to last and can withstand car washes.

About Danlaw

We are a global leader in connected car and automotive electronics. Our people live, breathe, and create innovative tech for some of the world's largest car makers. Thirty years ago, we designed software for the first 8-bit Electronic Engine Control module, and today, we continue to develop forward-looking technologies. We focus our efforts on R&D to stay ahead of rapidly changing industry needs in an increasingly connected world. Danlaw is known for ground-breaking tech, efficient development, and adaptive solutions for dynamic environments.

Our world-class connected vehicle solutions make Danlaw one of the largest suppliers of connected products, tools, and services in the world. We work closely with industry and government experts and was one of three companies chosen by the USDOT to develop the DSRC certification environment.

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Specifications for V2X Antenna and Exterior Coupler

Frequency	5.850 to 5.925 GHz
Glass Loss	Approximately -2dB through typical front / rear windshields
Isolation	Minimum 20 dB
Temperature Range	-40°C to +85°C
Wind Survivability	100 miles per hour minimum
Polarization	Omni-directional*
Gain	8 dBi peak, 5 dBi average
VSWR	<2
Normal Impedance	50 ohms
Radome Material	Fiberglass
Max Power	10 W
Dimensions (Antenna)	Height: 69 mm; Length: 137 mm; Width: 58 mm
Dimensions (Exterior Coupler)	Height: 16 mm; Length: 50 mm; Width: 69 mm
Cable Type Option	LMR-195 (if without integrated stub antenna); cable length and type customizable
Connector Option	SMA Male/Female (or) Fakra jack / plug water blue

Interior Coupler

Cable Type	LMR-195, LMR 100 for flexible mechanism; cable length and type customizable
Connector	SMA Male/Female (or) Fakra jack / plug water blue
Dimensions	59 x 69 mm (including plastics)

Specifications for GNSS Antenna

Frequency	1574 to 1606 MHz
Polarization	Linear
Temperature	-40°C to +85°C
GNSS Current	<20 mA
LNA Gain	15 dB
Gain	3 dB (including windshield)
Nominal Impedance	50 ohms
Max Power	10 W
Cable Type	RG-174, cable length and type customizable
Connector	SMA Male/Female (or) Fakra jack / plug water blue

*Radiation patterns provided upon request.



Low Profile Through Glass Antenna



Antenna with Exterior Coupler Top View

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Related Products



RouteLink Roadside Unit

Danlaw's RouteLink RSU easily adapts to existing traffic infrastructure. It is designed to enhance safety and mobility on the road. RouteLink alerts drivers to adverse driving conditions, enables pre-emption for first responders, and grants signal priority to buses and service vehicles.



AutoLink On-Board Unit

Danlaw's V2X On-Board Unit provides 360-degree situational awareness on the road and alerts drivers to potential hazards. Warning notifications will be sent to the driver through an LED display, infotainment system, or audio output.