## DATASHEET



# SkyLink - Through Glass V2X Antenna\*

The SkyLink Through Glass Integrated 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 glass mounted antenna with coupling pair to pass DSRC RF from interior to exterior (eliminates need to pass RF cables through roof or window opening i.e. due to sealing, aesthetics and cable losses)

Integrated GNSS antenna on interior coupler

Mounts on rear, front, or side glass with standard glass adhesive

Glass coupling compatible with existing magnetic roof mount DSRC antenna

Optional Cellular, WiFi, and other antennas may be integrated on request



# **Benefits**

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

Simplifies antenna installation on existing vehicle

Adjustable to any windshield angle (rear/front/side)

Exterior antenna easily removable from mounting bracket

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

Excellent GNSS reception with unobstructed sky view

This document is provided for information purposes only and the contents hereof are subject to change without

# **Superior Adaptability**

Danlaw's SkyLink V2X Antenna is a dualradio, glass-mounted antenna with coupling pair, which passes DSRC RF signals from the interior to the exterior of the vehicle. It can be adjusted to any windshield angle.

# 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 antenna is 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.

\*Patent Pending

## DATASHEET



# SkyLink - Through Glass V2X Antenna

Specifications for Dake Affectina	
Frequency	5.850 to 5.925 GHz
Glass Loss	Approximately -2dB through typical front / rear windshields
Isolation	Minimum 30 dB (which includes the Interior Coupler, Exterior Coupler, and Antenna)
Temperature Range	-40°C to +85°C (storage)
Wind Survivability	100 miles per hour minimum

					_
Chilb	Antenna	The second second		C	
	***************************************		8 K 2 J el [ 8 ] ell		1216

Polarization	Omni-directional*
Gain	4.7 to 5.2 dBi (Top Antenna), 1.5 to 6.6 dBi (Bottom Antenna)
VSWR	<2
Isolation	~50 dB
Normal Impedance	50 ohms
Radome Material	Fiberglass
Max Power	10 W
Mechanism	Single axis swivel
Dimensions	Height: ~425 mm (dual antenna); Diameter: ~16 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.



**Through Glass Integrated Antenna** (DSRC + GNSS)



Coupler (DSRC + GNSS)

#### Fax: 1 (248) 471-4485 **Related Products**

# This document is provided for

## 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.

information purposes only and the contents hereof are subject to change without notice.

Novi, Michigan 48375 USA

sales@danlawinc.com

Tel: 1 (248) 476-5571

**Contact Us** 

Danlaw, Inc. 41131 Vincenti Court

Danlaw reserves all rights information contained herein. No warranty or guarantee of any kind, either express or implied, is made in relation to the accuracy, reliability fitness for a particular purpose or content of this document.