

## DUAL ANTENNA CAN/US VERSION

PN# SLAU-UV-DB-ERT-DT-04-A



### OUTLINE

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The **SCAN~LINK Armour System™ Dual Antenna** provides a cost saving alternative for installations where the extended coverage of multiple antennas is required. The Dual Antenna detects passive RFID tags in SCAN~LINK™-tagged vests, hard hats, and marker tags. It has an optional relay system allowing for activation of external devices (such as sirens or lights) upon detection, and user-modifiable operation parameters via the RapidPair™ configuration dongle. Simple three-wire connection allows for reverse-triggered or ignition-triggered detection, and may be paired (with RapidPair™) to the In-Cab Display Unit.

Each element of the Dual Antenna can detect tags in excess of 20 feet (6 metres) away, and 10 feet (3 meters) side-to-side. It can be installed between 3 to 17 feet (1 to 5 metres) above grade.

Wireless communications between the Dual Antenna and Display means faster installation, and the Dual Antenna/Display come pre-paired so a system can be installed and tested - without requiring extra configuration. Low power consumption means a dedicated circuit is not required. The ABS-Polycarbonate/Aluminum IP65 casing provides the unit with a long, weather proof, life on even the most heavily used mobile equipment.

Dual Antenna Units are current as of January, 2017. Warranty claims will persist 13 months from sale date. Repairs will still be made after the warranty period has expired. **There are no user-serviceable parts inside.** If you wish to inquire about the warranty status of your unit, please contact us at [info@scan-link.com](mailto:info@scan-link.com).

## SPECIFICATIONS

### Absolute Specifications - Exceeding these may damage the unit!

Item	Minimum	Maximum	Notes
Input Voltage	+9 VDC	+34 VDC	Do not attempt to operate outside nominal 12-28VDC
Operating Temperature	-20° C	50° C	Cold temperature version available
Storage Temperature	-30° C	80° C	
Ingress Protection	IP65		Do Not Immerse
Reverse Polarity Protected	Yes		
Voltage Spike Withstand	75V @ 5A		

### Physical Specifications per Antenna Element (with Antenna back-plate facing down)

Item	Metric (mm)	Imperial (in)	Notes
Height	128 mm	5 1/16"	'Depth' when mounted on equipment
Length	246 mm	9 11/16"	'Height' when mounted on equipment
Minimum Install Length	292 mm	11 1/2"	Clearance for cable gland and wire bend
Width	165 mm	6 1/2"	
Wire Length	400 mm	15 5/8"	Measured from case to tip of connector
Backplate	Black Anodized Aluminum		
Casing	Yellow Polycarbonate/ABS Alloy Plastic		
Mounting Channels	11 mm	7/16"	Designed for 6mm (1/4") bolts
Installation Orientation	Vertical, Cables Down		Moisture vent <i>must face downward</i>
Power Connector	Deutsch DTM04-6P		Mates w/Deutsch DTM06-6S (Primary Antenna Only)
Enhanced Relay Connector	Deutsch DTM04-12PA		Mates w/Deutsch DTM06-12SA (Primary Antenna Only)
RF Connector	N Type Female		For RF Cable Interface between Antenna Elements

## Electrical Specifications

Item	Minimum	Maximum	Notes
Nominal Input Voltage (VCC)	+12 VDC	+28 VDC	On models with 'UV' in model number
Input Current @ 12 VDC		0.28 A	Nominal (not including Detection Relay Load)
Input Current @ 24 VDC		0.14 A	Nominal (not including Detection Relay Load)
Recommended External Fuse		5A	Ensure fuse accommodates connected relay loads
Reverse Input Trigger Voltage	4.5 VDC	VCC	Opto-isolated
Reverse Input Current Draw	1.5 mA	6 mA	Resistor limited
Detection Relay Contact Rating	-	2A @ 5VDC	RT/ERT Models Only
Solid State Relay Voltage	-	220 V	ERT Model Only
Solid State Relay Current	-	80mA	ERT Model Only
Fault Relay Contact Rating	-	2A @ 5VDC	ERT Model Only
RFID Scanner Radio Frequency	902.3 MHz	927.7 MHz	Unlicensed ISM Band, FHSS, 3W EIRP
Wireless Link Frequency	2405 MHz	2475MHz	Unlicensed ISM Band, 0.085W EIRP
IC ID	9283A-SLAU270NB		Under SCAN-LINK Technologies Inc.
FCC ID	YUU-SLAU270NB		Under SCAN-LINK Technologies Inc.

## Pinout Specifications

<b>Power Connector</b>	<b>Pin 1</b> Power Supply	VCC (+12-28VDC)	<b>Pin 6</b> Communications*	RS-485 Signal +, <b>Do Not Connect</b>
	<b>Pin 2</b> Power Supply	VDD (-) Equipment Ground	<b>Pin 5</b> Communications*	RS-485 Signal -, <b>Do Not Connect</b>
	<b>Pin 3</b> Reverse	Reverse Input	<b>Pin 4</b> Communications*	RS-485 Signal Common, <b>Do Not Connect</b>

<b>Enhanced Relay Connector</b>	<b>Pin 1</b> + Power	Always	VCC (+)	<b>Pin 12</b> - Power	Always	VDD (-)
	<b>Pin 2</b> VCC Relay	Detecting	Open	<b>Pin 11</b> VCC Relay	Detecting	VCC (+), 1A Max
		Not Detecting	VCC (+), 1A Max		Not Detecting	Open
	<b>Pin 3</b> Solid State Relay	Detecting	Open	<b>Pin 10</b> Solid State Relay Common	Always	80mA / 60 Ohms 220V Max
		Not Detecting	Connected to Solid State Relay Common			
	<b>Pin 4</b> Detection Relay Normally Open	Detecting	Open	<b>Pin 9</b> Fault Relay Normally Open	Fault or No Power	Open
		Not Detecting	Connected To Detection Relay Common		No Fault	Connected to Fault Relay Common
	<b>Pin 5</b> Detection Relay Common	Always	Detection Relay Common	<b>Pin 8</b> Fault Relay Common	Always	Fault Relay Common
	<b>Pin 6</b> Detection Relay Normally Closed	Detecting	Connected To Detection Relay Common	<b>Pin 7</b> Fault Relay Normally Closed	Fault or No Power	Connected to Fault Relay Common
		Not Detecting	Open		No Fault	Open

## RS-485 Communications Note

The RS-485 connections on the power harness are used for diagnostic and repair purposes only. They do not allow configuration, firmware upgrades or other features without specialized, proprietary software and procedures. *Any connection to these pins for any purpose or any attempt to communicate with the device not only voids any warranty claims, but may also destroy the functionality of the device beyond repair and compromise its ability to act as supplementary safety equipment.*

## Compatibility Specifications

<b>RapidPair™</b>	RPD-SN220/RPD-SS200
<b>In-Cab Display Unit</b>	SLDU-006SRE-DB

## DISCLAIMER

The **SCAN~LINK Armour System™**, is not 'safety rated' and thus cannot be relied on as front-line defense against equipment-to-pedestrian or equipment-to-object strikes. It is intended as a supplementary safety system only, to improve operator and pedestrian awareness and to help 'fill in' blind spots. There is no replacement for proper training and operation of equipment. The **SCAN~LINK Armour System™** is designed to augment existing site safety practices and policies, to further inhibit the chances of worker injuries and fatalities. Remember, pedestrians will not be detected if they are not wearing functioning, **SCAN~LINK™** tagged safety wear. All employees and visitors to any operations site should be trained in the functionality of the **SCAN~LINK Armour System™** and be fully aware of their surroundings while on site.

The **SCAN~LINK Armour System's™** installation, operation and maintenance, in all its forms, is covered by various legal documents, disclaimers and procedures, all of which are available upon request. By using the **SCAN~LINK Armour System™** or any of its components, you are bound to adhere to the conditions and practices outlined therein.

## MORE INFORMATION

For more information, please contact us via one of the methods below:

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