



Australian Shepherd PTA Series

Compact Efficiency from a Low-Profile Design
Best (Covert) Low-Profile High-Performance 5G Antenna



Australian Shepherd PTA Series



Superior Connectivity, Low-Impact Design

Versatile Connectivity

Advanced Multi-Network Performance

Parsec's Australian Shepherd Series is a compact all-in-one, **9:1** antenna featuring **4x4 MIMO cellular**, **4x4 MIMO Wi-Fi**, and **GNSS**. It supports either dual cellular modems running simultaneously or full 4x4 MIMO operation delivering powerful, flexible connectivity in a single solution.

- 4X4 MIMO 5G Cellular
- 4X4 MIMO Wi-Fi
- 5G Omni-Directional Antenna
- Bluetooth
- GPS
- IP67 Rating
- Low Profile



Australian Shepherd PTA Series



Superior Connectivity, Low-Impact Design

Built with Vehicle-Friendly Design Engineered for Rugged Performance

This **rugged, low-profile omni-directional** antenna operates across all common North American cellular bands, including support for **CBRS** and **LAA**. Built to perform in demanding environments, it features an **IP67 rating**, a strong adhesive gasket for **secure sealing**, and is **100% tested** to ensure consistent reliability.



Designed for convenience, the antenna requires just a **single 1.5-inch mounting hole** for quick and efficient installation. Its narrow width, low-profile height, and **vehicle-friendly** design allow it to fit **seamlessly** between ridges while maintaining a clean, aesthetic appearance.

Built for High-Availability Transport Applications



Ambulances



Police & Fire



Fleet



City Buses



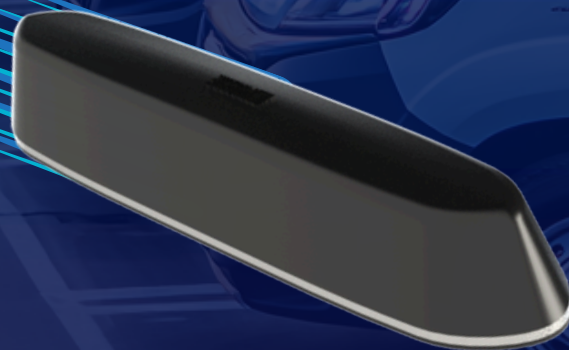
Remote Surveillance



Mobile Broadband

Why Choose the Australian Shepherd

- 4X4 MIMO 5G Cellular
- 4X4 MIMO Wi-Fi
- 5G Omni-Directional Antenna
- Bluetooth
- GPS
- IP67 Rating
- Low Profile





Specification Overview

PRO Australian Shepherd Series		
Applications	Best for Transportation Fleet and First Responders	
Configurations	9:1 – 4 CELL, 4 Wi-Fi, L1/L5 Dual Band GPS 8:1 – 4 CELL, 2 Wi-Fi, Bluetooth, L1 GPS 7:1 – 4 CELL, 2 Wi-Fi, L1 GPS 5:1 – 4 CELL, GPS 4:1 – 4 CELL	
Categories:	Mobile, Public safety, 5G	
Antennas Included:	Cellular, Wi-Fi, and GPS	
Mount Type	Mobile Roof/Direct Mount	
Mounting Accessories Available	Pole Mount, Mag Mount, Suction Mount	
Antenna Pattern:	Omni-Directional	
Available Colors:	Black and White	
Cable Type:	Cellular	LSR200
	Wi-Fi	LSR200
	GPS	LSR100
Standard Cable Length	1 FT, 15 FT	
Standard Connector Options	Cellular	SMA(M)
	Wi-Fi	RP-SMA(M)
	GPS	SMA(M)

Specifications

Frequencies			
4G/5G Cellular	617-894 MHz 1710-2700 MHz 3400-4000 MHz 5150-5925 MHz	Wi-Fi	2400-2483.5 MHz 4900-5900 MHz
		L1 GPS	1575.42 MHz
		L1/L5 Dual Band GPS	1563 – 1587 MHz 1164 – 1189 MHz
4G/5G Bands			
North America		B2, B4, B5, B7, B12,B13,B14, B17, B25, B26, B29, B30, B41, B46, B48, B66, B71 n2, n5, n12, n25, n26, n41, n48, n66, n71, n77	
EMEA		B1, B3, B7, B20, B28, B42, B43, B46n1, n3, n28, n77, n78	
Hardware			
Mechanical		Enviromental	
Dimension	13.5 inch Length 2.45 inch Width 2.01 inch Height	Operating Temperature	-40 °C to 85°C
Mounting	Single 1.5 in	Ingress Protection	IP67 Waterproof
RF Cable Length	1 FT or 15 FT	Radome Material	Plastic with UV Additive
Connectors	CELL: SMA(M) Wi-Fi: RP-SMA(M) GPS: SMA(M)	Cable Type	CELL: LSR200 Wi-Fi: LSR200 GPS: LSR100
For customizations, such as Connector Type, Cable Length, Color, Configuration, and Branding, please reach out to Parsec at sales@parsec-t.com .			

Electrical Specifications

<i>ID & Unit</i>	<i>Port</i>	<i>Parameters</i>	<i>Typ.</i>
Radiated Efficiency (%)	CELL 1 thru 4	617-663 MHz	40
	CELL 1 thru 4	663-798 MHz	60
	CELL 1 thru 4	798-894 MHz	50
	CELL 1 thru 4	1710-2700 MHz	70
	CELL 1 thru 4	3400-4000 MHz	65
	CELL 1 thru 4	5150-5925 MHz	45
	Wi-Fi 1 thru 4	2400-2483.5 MHz	60
	Wi-Fi 1 thru 4	4900-5900 MHz	60
Peak Gain (dBi)	CELL 1 thru 4	617-663 MHz	3.5
	CELL 1 thru 4	663-798 MHz	5.5
	CELL 1 thru 4	798-894 MHz	4
	CELL 1 thru 4	1710-2700 MHz	6.5
	CELL 1 thru 4	3400-4000 MHz	7
	CELL 1 thru 4	5150-5925 MHz	6
	Wi-Fi 1 thru 4	2400-2483.5 MHz	10
	Wi-Fi 1 thru 4	4900-5900 MHz	10
Return Loss 50Ω (dB)	CELL 1 thru 4	617-663 MHz	6
	CELL 1 thru 4	663-798 MHz	10
	CELL 1 thru 4	798-894 MHz	6
	CELL 1 thru 4	1710-2700 MHz	7
	CELL 1 thru 4	3400-4000 MHz	10
	CELL 1 thru 4	5150-5925 MHz	6
	Wi-Fi 1 thru 4	2400-2483.5 MHz	8
	Wi-Fi 1 thru 4	4900-5900 MHz	10
Isolation (dB)	CELL	617-663 MHz	6
	CELL	663-798 MHz	6
	CELL	798-894 MHz	7
	CELL	1710-2700 MHz	10
	CELL	3400-4000 MHz	18
	CELL	5150-5925 MHz	23
	Wi-Fi	2400-2483.5 MHz	11
	Wi-Fi	4900-5900 MHz	17

<i>ID & Unit</i>	<i>Port</i>	<i>Parameters</i>	<i>Typ.</i>
Polarization (dBi)	CELL, Wi-Fi		Linear
Max Input Power (Watts)	CELL, Wi-Fi		5
RF Connectors	CELL Wi-Fi		SMA(M) RP-SMA(M)
<ul style="list-style-type: none"> • Isolation and return loss do not include cable loss. • Electrical specifications based on antennawith a 2 ft. x 2 ft. external ground plane. 			

GNSS Electrical Specifications

<i>ID & Unit</i>	<i>Port</i>	<i>Parameters</i>	<i>Typ.</i>
Antenna + Preamp Gain (dBic)	GPS	L1: 1563 – 1587 MHz L5: 1164 – 1189 MHz	28 26
Polarization	GPS		RHCP
Filter Rejection (dB)	GPS	1625 MHz	TBD
GNSS Preamp Voltage (mA)	GPS		3 to 5
GNSS Preamp Current (mA)	GPS		< 45mA
RF Connector	GPS		SMA(M)
RF Cable Type	GPS		LSR100

Part Number Key

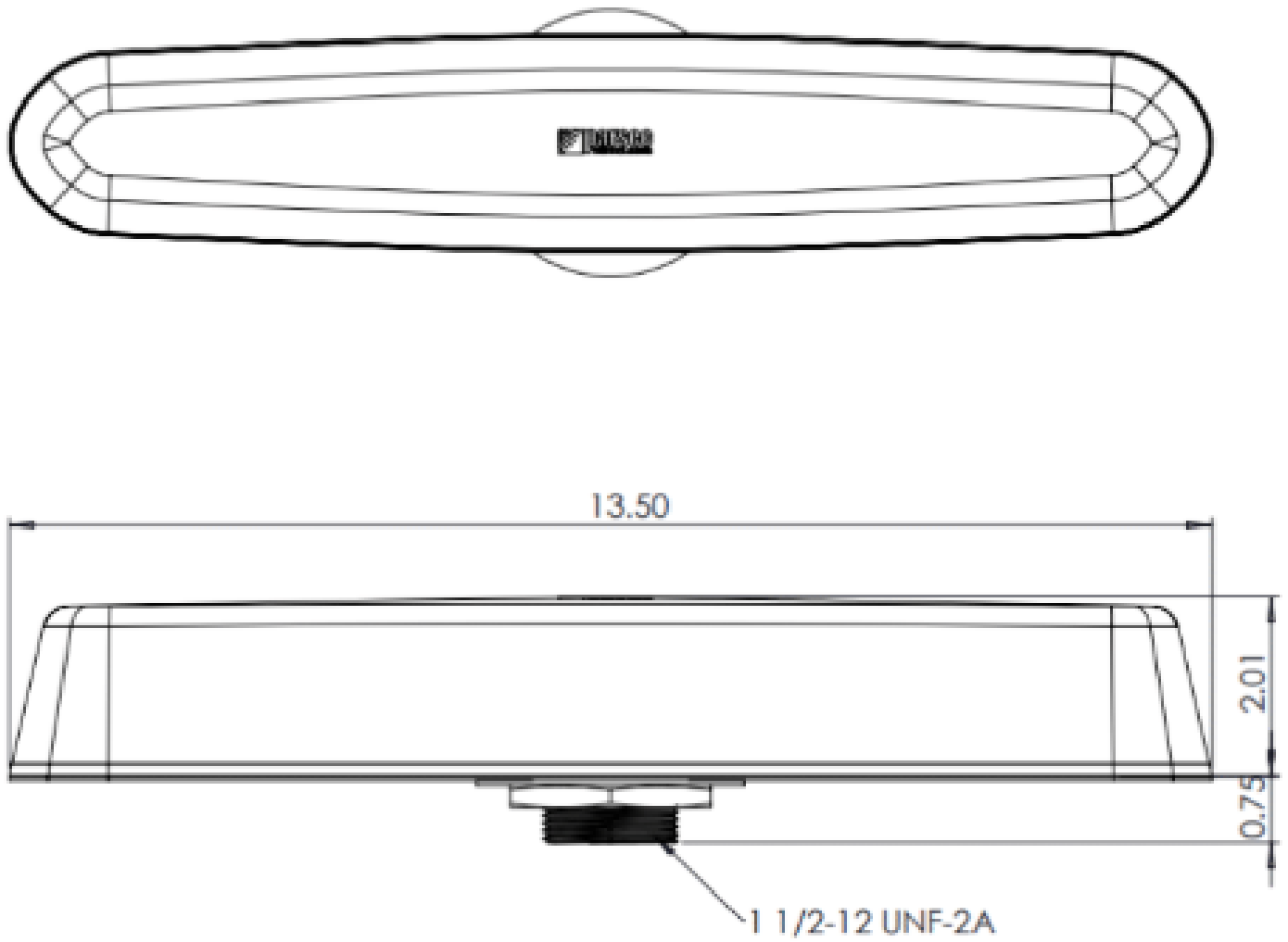
Part number example for a 9:1 Australian Shepherd: PTA9AS4L4WD15B

<i>Description</i>	<i>Abbreviation</i>	<i>Part Number</i>
All PTA Series	PTA	PTA
Number of Antenna in Housing/Configuration	9:1	PTA9
Antenna Abbreviation for Australian Shepherd	AS	PRO9AS
Number of Cellular Elements	#L	PTA9AS4L
Number of Wi-Fi Elements	#W	PTA9AS4L4W
Number of GPS Elements (1 GPS per Antenna, simply list G and no number)	G	PTA9AS4L4WG
Number of Bluetooth Elements (usually 1Bluetooth per Antenna, simply list B and nonumber)	B	PTA9AS4L4W
Cable Length Measured in Feet: 01 = 1 FT	01, 15, etc.	PTA9AS4L4WG15
Radome Color - B for Black, W for White	B or W	PTA9AS4L4WG15B
If SMA Connectors, simply leave Blank		PTA9AS4L4WG15B
Customization options available: Custom Cable Lengths, Custom Colors, Custom Connectors, Cable Kits, Marine Grade, Custom Cable Labelling. MOQ Applicable. Please contact us for more information at sales@parsec-t.com .		

Ordering Guide

<i>Config.</i>	<i>Part Number</i>	<i>Description</i>
9:1	PTA9AS4L4WG01B	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 1 ft Cable, Black
	PTA9AS4L4WG01W	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 1 ft Cable, White
	PTA9AS4L4WG03B	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 3 ft Cable, Black
	PTA9AS4L4WG03W	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 3 ft Cable, White
	PTA9AS4L4WG06B	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 6 ft Cable, Black
	PTA9AS4L4WG06W	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 6 ft Cable, White
	PTA9AS4L4WG15B	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 15 ft Cable, Black
	PTA9AS4L4WG15W	4 Cellular, 4 Wi-Fi, L1/L5 Dual Band GPS, 15 ft Cable, White

Dimensions



Hardware Accessories

Mounting Accessories	Part Number
Pole Mount Bracket Assembly, 1.5" Hole	PTA0149H
Rectangle Plate Pole Mount Bracket, 1.5" Hole	PTA0638
Customizable Pole Mount Bracket, 1.5" Hole	PTA0640
Roof Mount Bracket Assembly with L Bracket, 1.5" Hole	PTA0641
Magnetic Boot Mount-Black	PTA0329
Accessories	
Rooftop Gasket-Curved Roofs	PTA1207
Ground Plane with Adhesive Back, 20 in x 20 in, Can Be Cut to Size	PTA0587
Lightning Arrestor - SMA(F) to SMA(F)	PTA0476
Lightning Arrestor - N(F) to N(M)	PTA0736
SMA Wrench, Key Chain	PTA0194
Service: Cable Sleeving (Priced Per Ft)	Cable Sleeving
Replacement Parts	
Replacement Rooftop Gasket	PTA0592
Hardware Kit for 1.5" Shaft-Nut/Washer	PTA0761
1.5" Star Washer	PTA0257