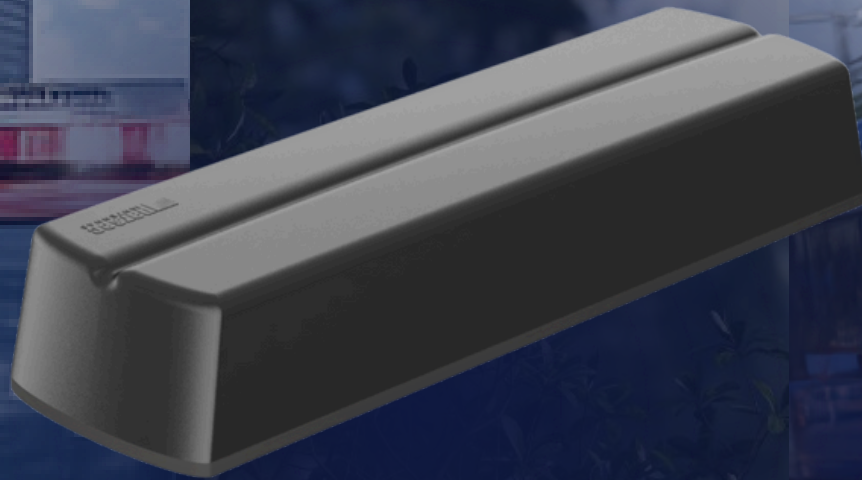




# Cujo Pro Series

Industry's First Breakproof Ultra-Ruggedized Package

Parsec's Newest Evolution for Public Sector



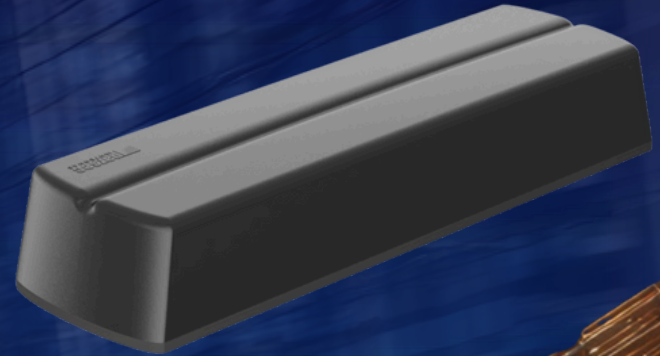


# Cujo Pro Series



## Breakproof Ultra-Ruggedized Package

Parsec's Cujo Series is **the newest evolution in Public Sector wireless connectivity**. Cujo's revolutionary Patented Antenna Technology, is a space saving design without sacrificing performance.



## Dual-Modem Capabilities

### One Antenna. Dual 4x4 MIMO Power.

The Cujo Pro Series is a low profile **thirteen-in-one, eight element** MIMO Cellular, **four element MIMO Wi-Fi, and GNSS** external waterproof antenna. The Cujo **supports simultaneous 4X4 MIMO operation of two separate CELL modems** with one antenna. By enabling both modems to operate at full 4x4 MIMO capacity, the Cujo Pro delivers faster data speeds, increased bandwidth, and seamless failover performance without requiring two separate antennas.



## Breakproof Ultra-Ruggedized Package

### Industry's First Breakproof Ultra Ruggedized Package Built for Extreme Durability

Designed for the harshest environments, **it's ultra-ruggedized to withstand debris, falling branches, and other rooftop impacts without compromising performance.** Whether mounted on emergency vehicles, transit buses, or industrial fleets, this antenna endures the elements and keeps critical communication connected when reliability matters most.

This **rugged low-profile omni-directional antenna** works on all the common North American Cellular bands. The antenna requires a single **1.5-inch mounting hole.** Optional magnetic mount allows mounting on a steel surface without mounting holes.



**Tree-Proof &  
Break-Proof**



# Built to Withstand it All

## Applications



Ambulances



Police & Fire



Urban Cities



City Buses



Remote Video  
Monitoring



Long Distance Connection

## Why Choose the Cujo

- Dual 4X4 MIMO 5G Cellular
- 4X4 MIMO Wi-Fi
- 5G Omni-Directional Antenna
- Ultra-Ruggedized Break Proof
- Low Profile







## Specification Overview

| PRO Cujo Series                |                                                |           |
|--------------------------------|------------------------------------------------|-----------|
| Applications                   | Public Safety, Vehicle Fleets, Command Centers |           |
| Configurations                 | 13:1 - 8 CELL, 4 Wi-Fi, GPS                    |           |
| Categories:                    | Public Safety, RVs, Enterprise                 |           |
| Antennas Included:             | Cellular, Wi-Fi, and GPS                       |           |
| Mount Type                     | Roof Mount                                     |           |
| Mounting Accessories Available | Pole Mount, Mag 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<br>1695-2700 MHz<br>3300-4100 MHz<br>4500-5925 MHz | Wi-Fi                                                                                                                                  | 2400 - 2483.5 MHz<br>4900 - 5900 MHz         |
|                                                                                                                                               |                                                                | GPS                                                                                                                                    | 1575.42 MHz                                  |
| 4G/5G Bands                                                                                                                                   |                                                                |                                                                                                                                        |                                              |
| North America                                                                                                                                 |                                                                | B2, B4, B5, B7, B12, B13, B14, B17, B25, B26, B29, B30, B41, B46, B48, B66, B71<br>n2, n5, n12, n25, n26, n41, n48, n66, n71, n77, n79 |                                              |
| EMEA                                                                                                                                          |                                                                | B1, B3, B7, B20, B28, B42, B43, B46<br>n1, n3, n28, n77, n78                                                                           |                                              |
| Mechanical                                                                                                                                    |                                                                | Enviromental                                                                                                                           |                                              |
| Dimension                                                                                                                                     | 15.23 inch X 4.7 inch X 2.58 inch                              | 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)<br>Wi-Fi: RP-SMA(M)<br>GPSL SMA(M)                | Cable Type                                                                                                                             | CELL: LSR200<br>Wi-Fi: LSR200<br>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 Specification

| <i>ID</i>                      | <i>Port</i>   | <i>Parameters</i> | <i>Typ.</i> |
|--------------------------------|---------------|-------------------|-------------|
| <b>Radiated Efficiency (%)</b> | CELL 1 thru 2 | 617 – 663 MHz     | 50          |
|                                | CELL 1 thru 2 | 663 – 746 MHz     | 60          |
|                                | CELL 1 thru 2 | 746 – 798 MHz     | 60          |
|                                | CELL 1 thru 2 | 1695 – 2110 MHz   | 80          |
|                                | CELL 1 thru 2 | 2110 – 2700 MHz   | 80          |
|                                | CELL 1 thru 2 | 3300 – 4100 MHz   | 75          |
|                                | CELL 1 thru 2 | 4500 – 5925 MHz   | 60          |
|                                | CELL 3 thru 4 | 617 – 663 MHz     | 45          |
|                                | CELL 3 thru 4 | 663 – 746 MHz     | 45          |
|                                | CELL 3 thru 4 | 746 – 798 MHz     | 40          |
|                                | CELL 3 thru 4 | 1695 – 2110 MHz   | 60          |
|                                | CELL 3 thru 4 | 2110 – 2700 MHz   | 75          |
|                                | CELL 3 thru 4 | 3300 – 4100 MHz   | 75          |
|                                | CELL 3 thru 4 | 4500 – 5925 MHz   | 60          |
|                                | CELL 5 thru 6 | 698 – 746 MHz     | 55          |
|                                | CELL 5 thru 6 | 746 – 798 MHz     | 60          |
|                                | CELL 5 thru 6 | 798 – 894 MHz     | 65          |
|                                | CELL 5 thru 6 | 1695 – 2110 MHz   | 70          |
|                                | CELL 5 thru 6 | 2110 – 2700 MHz   | 80          |
|                                | CELL 5 thru 6 | 3300 – 4100 MHz   | 75          |
|                                | CELL 5 thru 6 | 4500 – 5925 MHz   | 60          |
|                                | CELL 7 thru 8 | 698 – 746 MHz     | 40          |
|                                | CELL 7 thru 8 | 746 – 798 MHz     | 45          |
|                                | CELL 7 thru 8 | 798 – 894 MHz     | 45          |
|                                | CELL 7 thru 8 | 1695 – 2110 MHz   | 65          |
|                                | CELL 7 thru 8 | 2110 – 2700 MHz   | 75          |
|                                | CELL 7 thru 8 | 3400 – 4100 MHz   | 75          |
|                                | CELL 7 thru 8 | 4500 – 5925 MHz   | 60          |
|                                | WiFi 1 thru 4 | 2400 - 2483.5 MHz | 75          |
|                                | Wifi 1 thru 4 | 4900 - 5900 MHz   | 70          |
| <b>Peak Gain (dBi)</b>         | CELL 1 thru 2 | 617 – 663 MHz     | 2           |
|                                | CELL 1 thru 2 | 663 – 746 MHz     | 3.5         |
|                                | CELL 1 thru 2 | 746 – 798 MHz     | 4.5         |
|                                | CELL 1 thru 2 | 1695 – 2110 MHz   | 6           |
|                                | CELL 1 thru 2 | 2110 – 2700 MHz   | 7           |
|                                | CELL 1 thru 2 | 3300 – 4100 MHz   | 6.5         |
|                                | CELL 1 thru 2 | 4500 – 5925 MHz   | 6           |
|                                | CELL 3 thru 4 | 617 – 663 MHz     | 2.5         |
|                                | CELL 3 thru 4 | 663 – 746 MHz     | 2.5         |
|                                | CELL 3 thru 4 | 746 – 798 MHz     | 3           |



## Electrical Specification

|                                                |               |                   |     |
|------------------------------------------------|---------------|-------------------|-----|
|                                                | CELL 3 thru 4 | 1695 – 2110 MHz   | 4.5 |
|                                                | CELL 3 thru 4 | 2110 – 2700 MHz   | 6.5 |
|                                                | CELL 3 thru 4 | 3300 – 4100 MHz   | 6.5 |
|                                                | CELL 3 thru 4 | 4500 – 5925 MHz   | 6   |
|                                                | CELL 5 thru 6 | 698 – 746 MHz     | 4   |
|                                                | CELL 5 thru 6 | 746 – 798 MHz     | 5   |
|                                                | CELL 5 thru 6 | 798 – 894 MHz     | 6   |
|                                                | CELL 5 thru 6 | 1695 – 2110 MHz   | 6   |
|                                                | CELL 5 thru 6 | 2110 – 2700 MHz   | 6.5 |
|                                                | CELL 5 thru 6 | 3300 – 4100 MHz   | 6.5 |
|                                                | CELL 5 thru 6 | 4500 – 5925 MHz   | 6   |
|                                                | CELL 7 thru 8 | 698 – 746 MHz     | 2   |
|                                                | CELL 7 thru 8 | 746 – 798 MHz     | 3   |
|                                                | CELL 7 thru 8 | 798 – 894 MHz     | 4   |
|                                                | CELL 7 thru 8 | 1695 – 2110 MHz   | 5   |
|                                                | CELL 7 thru 8 | 2110 – 2700 MHz   | 6.5 |
|                                                | CELL 7 thru 8 | 3300 – 4100 MHz   | 6.5 |
|                                                | CELL 7 thru 8 | 4500 – 5900 MHz   | 6   |
|                                                | WiFi 1 thru 4 | 2400 – 2483.5 MHz | 5   |
|                                                | WiFi 1 thru 4 | 4900 – 5900 MHz   | 6   |
| <b>Return Loss 50 <math>\Omega</math> (dB)</b> | CELL 1 thru 2 | 617 – 663 MHz     | 7   |
|                                                | CELL 1 thru 2 | 663 – 746 MHz     | 10  |
|                                                | CELL 1 thru 2 | 746 – 798 MHz     | 8   |
|                                                | CELL 1 thru 2 | 1695 – 2000 MHz   | 14  |
|                                                | CELL 1 thru 2 | 2000 – 2700 MHz   | 11  |
|                                                | CELL 1 thru 2 | 3300 – 4150 MHz   | 15  |
|                                                | CELL 1 thru 2 | 4500 – 5000 MHz   | 13  |
|                                                | CELL 1 thru 2 | 5000 – 5925 MHz   | 8   |
|                                                | CELL 3 thru 4 | 617 – 663 MHz     | 6   |
|                                                | CELL 3 thru 4 | 663 – 746 MHz     | 9   |
|                                                | CELL 3 thru 4 | 746 – 798 MHz     | 6   |
|                                                | CELL 3 thru 4 | 1695 – 2000 MHz   | 12  |
|                                                | CELL 3 thru 4 | 2000 – 2700 MHz   | 10  |
|                                                | CELL 3 thru 4 | 3300 – 4100 MHz   | 11  |
|                                                | CELL 3 thru 4 | 4500 – 5000 MHz   | 11  |
|                                                | CELL 3 thru 4 | 5000 – 5925 MHz   | 7   |
|                                                | CELL 5 thru 6 | 698 – 746 MHz     | 10  |
|                                                | CELL 5 thru 6 | 746 – 798 MHz     | 11  |
|                                                | CELL 5 thru 6 | 798 – 894 MHz     | 7.5 |

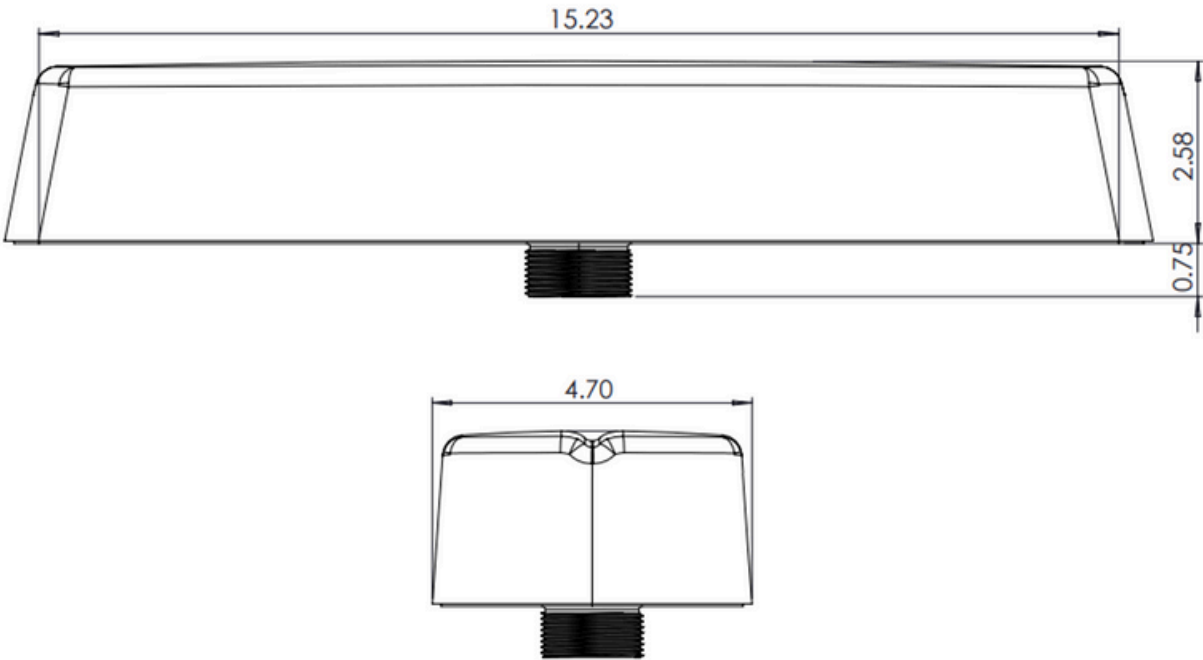
## Electrical Specification

|                |               |                   |     |
|----------------|---------------|-------------------|-----|
|                | CELL 5 thru 6 | 1695 – 2000 MHz   | 12  |
|                | CELL 5 thru 6 | 2000 – 2700 MHz   | 10  |
|                | CELL 5 thru 6 | 3300 – 3700 MHz   | 12  |
|                | CELL 5 thru 6 | 3700 – 4100 MHz   | 15  |
|                | CELL 5 thru 6 | 4500 – 5000 MHz   | 13  |
|                | CELL 5 thru 6 | 5000 – 5925 MHz   | 9   |
|                | CELL 7 thru 8 | 698 – 746 MHz     | 7.5 |
|                | CELL 7 thru 8 | 746 – 798 MHz     | 9   |
|                | CELL 7 thru 8 | 798 – 894 MHz     | 6   |
|                | CELL 7 thru 8 | 1695 – 2000 MHz   | 12  |
|                | CELL 7 thru 8 | 2000- 2700 MHz    | 9   |
|                | CELL 7 thru 8 | 3300 – 3700 MHz   | 14  |
|                | CELL 7 thru 8 | 3700 – 4100 MHz   | 15  |
|                | CELL 7 thru 8 | 4500 – 5000 MHz   | 12  |
|                | CELL 7 thru 8 | 5000 – 5925 MHz   | 8   |
|                | WiFi 1 thru 4 | 2400 - 2483.5 MHz | 10  |
|                | WiFi 1 thru 4 | 4900 - 5900 MHz   | 10  |
| Isolation (dB) | CELL-MIMO_1   | 617 – 729 MHz     | 13  |
|                | CELL-MIMO_1   | 729 – 798 MHz     | 14  |
|                | CELL-MIMO_1   | 1695 – 2110 MHz   | 10  |
|                | CELL-MIMO_1   | 2110 - 2700 MHz   | 12  |
|                | CELL-MIMO_1   | 3300 – 4100 MHz   | 17  |
|                | CELL-MIMO_1   | 4500 – 5925 MHz   | 25  |
|                | CELL-MIMO_5   | 698 – 859 MHz     | 13  |
|                | CELL-MIMO_5   | 859 – 894 MHz     | 14  |
|                | CELL-MIMO_5   | 1625 – 2110 MHz   | 10  |
|                | CELL-MIMO_5   | 2110 - 2700 MHz   | 11  |
|                | CELL-MIMO_5   | 3300 – 3700 MHz   | 14  |
|                | CELL-MIMO_5   | 3700 - 4100 MHz   | 22  |
|                | CELL-MIMO_5   | 4500 – 5925 MHz   | 25  |
|                | CELL-Adjacent | 617 – 777 MHz     | 8.5 |
|                | CELL-Adjacent | 777 – 849 MHz     | 11  |
|                | CELL-Adjacent | 849 – 894 MHz     | 12  |
|                | CELL-Adjacent | 1625 – 2110 MHz   | 10  |
|                | CELL-Adjacent | 2110 - 2700 MHz   | 11  |
|                | CELL-Adjacent | 3300 - 3700 MHz   | 13  |
|                | CELL-Adjacent | 3700 - 4100 MHz   | 19  |
|                | CELL-Adjacent | 4500 - 5925 MHz   | 24  |
|                | WiFi          | 2400 - 2483.5 MHz | 15  |
|                | WiFi          | 4900 - 5900 MHz   | 15  |



|                                                                                                                                                                                                                                                                                                                                                                                                           |      |  |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--|--------|
| Polarization (dBi)                                                                                                                                                                                                                                                                                                                                                                                        | CELL |  | Linear |
| Max Input Power (Watts)                                                                                                                                                                                                                                                                                                                                                                                   | CELL |  | 5      |
| RF Connectors                                                                                                                                                                                                                                                                                                                                                                                             | CELL |  | SMA(M) |
| RF Cable Type                                                                                                                                                                                                                                                                                                                                                                                             | CELL |  | LSR200 |
| <ul style="list-style-type: none"><li>Isolation, return loss, and peak gain do not include cable loss.</li><li>CELL-MIMO isolation is the isolation between elements grouped for 4X4 MIMO for one modem.</li><li>CELL-Adjacent isolation is the isolation between adjacent elements for separate modems.</li><li>Electrical specifications based on antenna mounted away from other conductors.</li></ul> |      |  |        |

Dimensions



## Part Number Key

Part Number Example for a 13:1 Cujo: PRO13CJ8L4WG15B

| <i>Description</i>                                                                                                                                                                                                       | <i>Abbreviation</i> | <i>Part Number</i> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|
| All PRO Series                                                                                                                                                                                                           | PRO                 | PRO                |
| Number of Antenna in Housing/Configuration                                                                                                                                                                               | 13:1                | PRO13              |
| Antenna Abbreviation for Cujo                                                                                                                                                                                            | CJ                  | PRO13CJ            |
| Number of Cellular Elements                                                                                                                                                                                              | #L                  | PRO13CJ8L          |
| Number of Wi-Fi Elements                                                                                                                                                                                                 | #W                  | PRO13CJ8L4W        |
| Number of GPS Elements                                                                                                                                                                                                   | G                   | PRO13CJ8L4WG       |
| Cable Length Measured in Feet: 01 = 1 FT                                                                                                                                                                                 | 01, 06, 15, etc     | PRO13CJ8L4WG15     |
| Optional L Version - Includes the Options Listed                                                                                                                                                                         | B or W              | PRO13CJ8L4WG15B    |
| 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. |                     |                    |

## GNSS Electrical Specifications

| <i>ID &amp; Unit</i>         | <i>Port</i> | <i>Parameters</i> | <i>Typ.</i> |
|------------------------------|-------------|-------------------|-------------|
| Antenna + Preamp Gain (dBic) | GPS         | 1570 – 1581 MHz   | 28          |
| Polarization                 | GPS         |                   | RHCP        |
| Filter Rejection (dB)        | GPS         | 1625 MHz          | 12          |
| GNSS Preamp Voltage (mA)     | GPS         |                   | 2.2 to 5    |
| GNSS Preamp Current (mA)     | GPS         |                   | 5 to 15     |
| RF Connector                 | GPS         |                   | SMA(M)      |
| RF Cable Type                | GPS         |                   | LSR100      |

## Ordering Guide

### Maximum Configurations

| <i>Config.</i> | <i>Part Number</i> | <i>Description</i>                                      |
|----------------|--------------------|---------------------------------------------------------|
| <b>8:1</b>     | PRO8CJ8L01B        | 8 Cellular, 1 ft Cable, Black                           |
|                | PRO8CJ8L15B        | 8 Cellular, 15 ft Cable, Black                          |
|                | PRO8CJ8L01W        | 8 Cellular, 1 ft Cable, White                           |
|                | PRO8CJ8L15W        | 8 Cellular, 15ft Cable, White                           |
| <b>9:1</b>     | PRO9CJ8LG01B       | 8 Cellular, GPS 1 ft Cable, Black                       |
|                | PRO9CJ8LG15B       | 8 Cellular, GPS 15 ft Cable, Black                      |
|                | PRO9CJ8LG01W       | 8 Cellular, GPS 1 ft Cable, White                       |
|                | PRO9CJ8LG15W       | 8 Cellular, GPS 15 ft Cable, White                      |
| <b>11:1</b>    | PRO11CJ8L2WG01B    | 8 Cellular, 2 Wi-Fi, GPS, 1 ft Cable, Black             |
|                | PRO11CJ8L2WG15B    | 8 Cellular, 2 Wi-Fi, GPS, 15ft Cable, Black             |
|                | PRO11CJ8L2WG01W    | 8 Cellular, 2 Wi-Fi, GPS, 1 ft Cable, White             |
|                | PRO11CJ8L2WG15W    | 8 Cellular, 2 Wi-Fi, GPS, 15ft Cable, White             |
| <b>12:1</b>    | PRO12CJ8L2WBG01B   | 8 Cellular, 2 Wi-Fi, Bluetooth, GPS, 1 ft Cable, Black  |
|                | PRO12CJ8L2WBG15B   | 8 Cellular, 2 Wi-Fi, Bluetooth, GPS, 15 ft Cable, Black |
|                | PRO12CJ8L2WBG01W   | 8 Cellular, 2 Wi-Fi, Bluetooth, GPS, 1 ft Cable, White  |
|                | PRO12CJ8L2WBG15W   | 8 Cellular, 2 Wi-Fi, Bluetooth, GPS, 15ft Cable, White  |
| <b>13:1</b>    | PRO13CJ8L4WG01B    | 8 Cellular, 4 Wi-Fi, GPS, 1 ft Cable, Black             |
|                | PRO13CJ8L4WG15B    | 8 Cellular, 4 Wi-Fi, GPS, 15 ft Cable, Black            |
|                | PRO13CJ8L4WG01W    | 8 Cellular, 4 Wi-Fi, GPS, 1 ft Cable, White             |
|                | PRO13CJ8L4WG15W    | 8 Cellular, 4 Wi-Fi, GPS, 15 ft Cable, White            |



## Hardware Accessories

| Accessories                                                       | Part Number    |
|-------------------------------------------------------------------|----------------|
| Pole Mount Bracket                                                | PTA0638        |
| Customizable Pole Mount Bracket                                   | PTA0640        |
| Roof Mount Bracket Assembly with L Bracket                        | PTA0641        |
| Magnetic Boot Mount (Black)                                       | PTA1288        |
| 1.5" - 6" Shaft Extender                                          | PTA0635C       |
| Ground Plane with Adhesive Back, 20 in x 20 in, Can Be Cut to Sie | 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 Kit                                    | PTA1287        |
| Hardware Kit for 1.5" Shaft - Nut/Washer                          | PTA0761        |
| 1.5" Star Washer                                                  | PTA0257        |