Antennas

Series: Jaguar

## Features:

- 2xMiMo 698-960/1710-2690MHz
- WiFi 2400-2500/4900-5900MHz
- Active GNSS:
- GPS, Galileo, Glonass, Beidou
- LNA Gain 30dB
- Size $145 \times 135 \times 25 \mathrm{~mm}$
- Adhesive mount on plastic and glass fiber surfaces
- Mounting accessory for metallic surfaces


## Applications:

- Vehicle mount multiband antenna
- High Speed LTE data and WiFi
- Tracking, Navigation
- Fleet management
- Utility Vans (Gas, Water, Electricity)

| Pulse Worldwide Headquarters | Pulse/Larsen Antennas | Europe Headquarters |
| :---: | :---: | :---: |
| 15255 Innovation Drive \#100 | 18110 SE $34^{\text {th }}$ St Bldg 2 Suite 250 | Pulse GmbH \& Do, KG |
| San Diego, CA 92128 | Vancouver, WA 98683 | Zeppelinstrasse 15 |
| USA | USA | Herrenberg, Germany |
| Tel:1-858-674-8100 | Tel: 1-360-944-7551 | Tel: 49 7032 7806 0 |

Europe Headquarters Zeppelinstrasse 15 Herrenberg, Germany Tel: 49703278060

Pulse (Suzhou) Wireless Products Co, Inc. 99 Huo Ju Road(\#29 Bldg,4 ${ }^{\text {th }}$ Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 8651268079998

# ®PulseLARSEN <br> Antennas 

## Series: Jaguar

## ELECTRICAL SPECIFICATIONS

## LTE

Frequency
Nominal Impedance
VSWR
Average Efficiency(698-960MHz)
Average Efficiency(1710-2690MHz)
Peak Gain (698-960MHz)
Peak Gain (1710-2690MHz)

## WIFI

## Frequency

Nominal Impedance
VSWR @2400-2500MHz
VSWR @4900-5900MHz
Average Efficiency(2400-2500MHz)
Average Efficiency(4900-5900MHz)
Peak Gain (2400-2500MHz)
Peak Gain (4900-5900MHz)

698-960/1710-2690
MHz
50
2.2

72
68
4.4
5.4

2400-2500/4900-5900
MHz
50
$\Omega$
Max
Max
\%
\%

## Series: Jaguar

## ELECTRICAL SPECIFICATIONS

GPS
Frequency
$1561.098 \pm 2.046 / 1575.42 \pm 1.023 / 1602.5625 \pm 4 \mathrm{MHz}$
Nominal Impedance
VSWR
Gain (Radiating element)
Gain (LNA gain) $30 \mathrm{~dB}+/-2 \mathrm{~dB}$
Polarization
Out of Band Rejection

$$
\begin{array}{r}
698 \mathrm{MHz}>70 \mathrm{~dB} \\
960 \mathrm{MHz}>65 \mathrm{~dB} \\
1710 \mathrm{MHz}>60 \mathrm{~dB} \\
2170 \mathrm{MHz}>65 \mathrm{~dB} \\
2400 \mathrm{MHz}>65 \mathrm{~dB}
\end{array}
$$

Noise FigureCurrent Consumption$<2.4$dB
Operating Voltage3.3-5
$\mathrm{Vdc} \pm 0.5 \mathrm{~V}$$<11$

## Series: Jaguar

## ELECTRICAL SPECIFICATIONS

Cable and Connector type

| Item | GPSLPMB403 RF Cables | Cable Type | Cable Length | Connector |
| :---: | :---: | :---: | :---: | :---: |
| 1 | LTE-1 | LMR195 | $\begin{gathered} 3 \text { meters } \\ \text { [ 118.11" ] } \end{gathered}$ | SMA Male |
| 2 | WiFi | LMR195 |  | RP-SMA Male |
| 3 | GPS | LMR100 |  | SMA Male |
| 4 | LTE-2 | LMR195 |  | SMA Male |

## Series: Jaguar

## MECHANICAL SPECIFICATIONS

## Plastic radome

Color
Ingress Protection
Weight
Cable retention: Pull off
Fixing system

SABIC PC943
Black
IP67
400 g
30 N mini
3M VHB4959 ( $\mathrm{T}=3 \mathrm{~mm}$ )

## ENVIRONMENTAL SPECIFICATIONS

Operating temperature

# ®PulseLARSEN <br> Antennas 

## Series: Jaguar

Description: $2 \times$ LTE, WiFi, GNSS Multiband Vehicular Antenna

## PART NUMBER: GPSLPMB401

## MECHANICAL DRAWING



Series: Jaguar

## MECHANICAL DRAWING



Issue: 1720

## CHARTS

## LTE 1 and LTE2 VSWR

VSWR VS Frequency measured in free space


## CHARTS

## WiFi VSWR*



* Test on bracket and diameter is 500 mm ground plane


## CHARTS

## Isolation

Isolation vs Frequency measured in free space


Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Series: Jaguar
Description: $2 x$ LTE, WiFi, GNSS Multiband

## CHARTS

## GPS LNA Gain and out-of-band rejection



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## CHARTS

## LTE 1 and LTE2 Efficiency

Efficiency vs Frequency measured in free space


## Series: Jaguar

## CHARTS

## WiFi Efficiency*



* Test on bracket and diameter is 500 mm ground plane


## CHARTS

## LTE1 and LTE2 Peak Gain

Peak Gain vs Frequency measured in free space


## CHARTS

## WiFi Peak Gain*



* Test on bracket and diameter is 500 mm ground plane


## Series: Jaguar

## CHARTS

## Gain Plots LTE1



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE1



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE1



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE1



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE1



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

## PART NUMBER: GPSLPMB401

## CHARTS

## Gain Plots LTE1



## Series: Jaguar

## CHARTS

## Gain Plots LTE2



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE2



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE2



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE2



Issue: 1720
In the effort to improve our products, we reserve the right to make changes judged to be necessary.

## Series: Jaguar

## CHARTS

## Gain Plots LTE2



## Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

## PART NUMBER: GPSLPMB401

## CHARTS

## Gain Plots LTE2



## CHARTS

## Gain Plots WIFI*



* Test on bracket and diameter is 500 mm ground plane


## CHARTS

## Gain Plots WIFI*



* Test on bracket and diameter is 500 mm ground plane


## CHARTS

## Gain Plots WIFI*



* Test on bracket and diameter is 500 mm ground plane

Issue: 1720

## CHARTS

## Gain Plots WIFI*



* Test on bracket and diameter is 500 mm ground plane

Issue: 1720

## CHARTS

## Gain Plots WIFI*



* Test on bracket and diameter is 500 mm ground plane


## CHARTS

## Gain Plots WIFI*



* Test on bracket and diameter is 500 mm ground plane


## CHARTS

## Radiation Pattern ( $70 \mathrm{~mm} \times 70 \mathrm{~mm}$ ground plane ) GPS \& Galileo



25 X 25 X 4mm Ceramic Antenna

$25 \times 25 \times 4 m m$ Ceramic Antenna

## CHARTS

## Radiation Pattern ( $70 \mathrm{~mm} \times 70 \mathrm{~mm}$ ground plane ) GLONASS


$25 \times 25 \times 4 m m$ Ceramic Antenna

$25 \times 25 \times 4 m m$ Ceramic Antenna

## CHARTS

## Radiation Pattern (70mm x 70mm ground plane ) BD2


$25 \times 25 \times 4 m m$ Ceramic Antenna

$25 \times 25 \times 4 m m$ Ceramic Antenna

Series: Jaguar

## PACKAGING

- Each antenna packed in a plastic bag
- 12 bags of antennas packed in a cardboard box.
- 1 label on each box with qty, part number, date code.


## ASSEMBLY

When this antenna is applied to a non-metallic surface, like glass fiber or plastic material, it could be adhered on the surface directly.


Series: Jaguar

Description: 2xLTE, WiFi, GNSS Multiband Vehicular Antenna

## PART NUMBER: GPSLPMB401

## ASSEMBLY

Mounting with a plastic bracket: When this antenna applied to the metal surface, a plastic bracket is needed to elevate the antenna 1 " for the optimum RF performance.

## Option 1, LPMB4BRACKETMM Magnetic Mount

----Removable Mounting (No Surface damage)
The mounting surface is made of steel or iron.
Firstly, The antenna adhered on the plastic bracket with magnets by the adhesive tape.
Then the whole assemble could be attached on the iron metals by magnets, and also could be removed from the metal surface easily without surface damage.


Description: $2 \times$ LTE, WiFi, GNSS Multiband Vehicular Antenna

## PART NUMBER: GPSLPMB401

## ASSEMBLY

## Option 2, LPMB4BRACKETAM Adhesive Mount -- Permanent Mount

Especially when the mounting surface is made of non-ferrum metals, like aluminum, Firstly, the antenna adhered on the plastic bracket by the adhesive tape,
Then the whole assemble could adhere on the mounting surface by the 3MVHB adhesive tape (3M VHB4959 70mmX70mm).


## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Antennas category:
Click to view products by PulseLarsen manufacturer:

Other Similar products are found below :
GAN30084EU 930-033-R GW17.07.0250E 1513563-1 EXE902SM APAMPG-117 MAF94383 W3908B0100 W6102B0100 YE57211330RSMM 108-00014-50 66089-2406 SPDA17RP918 A09-F8NF-M A09-F5NF-M RGFRA1903041A1T W3593B0100 W3921B0100 SIMNA-868 SIMNA-915 SIMNA-433 W1044 W1049B090 A75-001 WTL2449CQ1-FRSMM CPL9C EXB148BN 0600-00060 TRA9020S3PBN-001 Y4503 GD5W-28P-NF MA9-7N GD53-25 GD5W-21P-NF C37 MAF94051 MA9-5N EXD420PL B1322NR QWFTB120 MAF94271 MAF94300 GPSMB301 FG4403 AO-AGSM-OM54 5200232 MIKROE-2349 WCM.01.0111 MIKROE-2393 MIKROE-2352

