# LPE-7-27

Low Profile LTE

22/09/2015 v.1

## Low Profile 2G/3G/4G Antenna



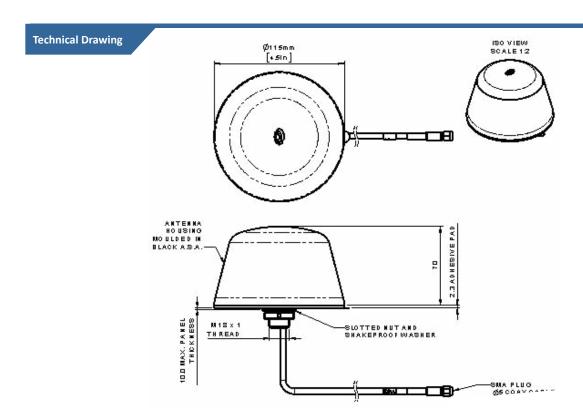
Rugged Low Profile Design Wideband LTE-Cellular Element Weatherproof Casing

The LPE antenna series is a range of low profile antennas incorporating a combination of wideband cellular elements covering 2G/3G and 4G frequencies in a robust compact housing.

Designed to be tough yet cost effective, the antennas are completely enclosed in a moulded housing made form weather and impact resistant plastic. The range is supplied with short fly leads and can be kitted with Panorama Antennas' low loss extension cables in various lengths.

#### Ground Plane Independent

This antenna does not require a ground plane, and maintains a high level of performance even when mounted on a non-metallic surface.





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Waiver: The data given above is indicative of the performance of the product/s under particular conditions and does not imply a guarantee of performance. These specifications are subject to change without notice.

#### Part No.

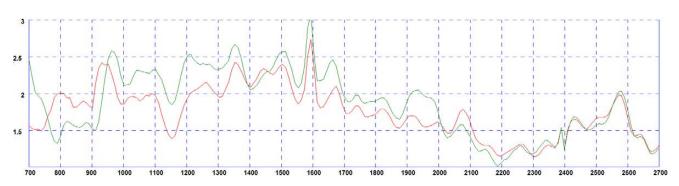
LPE-7-27

| Electrical Data       |             |           |              |                             |
|-----------------------|-------------|-----------|--------------|-----------------------------|
| Frequency Range (MHz) |             | Element 1 |              | 698-960 / 1700-2700         |
| Operational Bands     |             | Element 1 |              | LTE / Cellular              |
| Peak Gain: Isotropic  |             | Element 1 | 698-960MHz   | 4dBi                        |
| Peak Gain: Isotropic  |             | Element 1 | 1710-2700MHz | 6dBi                        |
| Typical VSWR          |             | Element 1 |              | ≤ 2.5:1                     |
| Polarisation          |             |           |              | Vertical                    |
| Impedance             |             |           |              | 50Ω                         |
| Max Input Power (W)   |             |           |              | 50                          |
| Mechanical Data       |             |           |              |                             |
| Dimensions            | Height      |           |              | 2.8" (70mm)                 |
|                       | Diameter    |           |              | 4.5" (115mm)                |
| Operating Temp        |             |           |              | -22°/ 176°F (-30° / +80°C ) |
| Material              |             |           |              | A.S.A                       |
| Colour                |             |           |              | Black                       |
| Mounting Data         |             |           |              |                             |
| Mounting type         |             |           |              | Panel mount                 |
| Max panel thickness   |             |           |              | 0.4"(10mm)                  |
| Mounting hole         |             |           |              | 3/4" (19mm)                 |
| Cable Data            |             |           |              |                             |
| Cell / LTE Cable      | Туре        |           |              | CS29 (double shielded RG58) |
|                       | Diameter    |           |              | 0.2"(5mm)                   |
|                       | Length      |           |              | 1' (0.3m)                   |
|                       | Termination |           |              | SMA (male)                  |

We recommend the customer uses Panorama CS29 extension cables for 2G/3G/4G, CS32 extension cables for WLAN and RG174 or CS23 for GPS.

VSWR

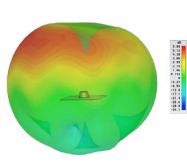
### Typical VSWR cellular / LTE element 1\*



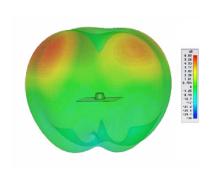
<sup>\*</sup> Red VSWR measured in on a 400 x400mm (1.3' x 1.3') ground plane without extension cables. Green VSWR measured in free space without extension cables.

Typical 3D Pattern - Element 2 700MHz

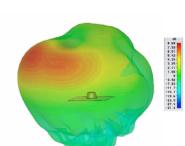
Typical 3D Pattern - Element 2 800MHz



Typical 3D Pattern - Element 2 900MHz

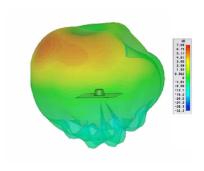


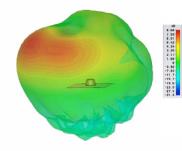
Typical 3D Pattern - Element 2 1800MHz

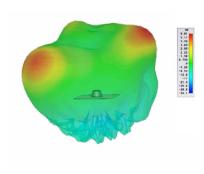


Typical 3D Pattern - Element 2 2000MHz

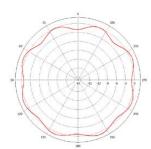
Typical 3D Pattern - Element 2 2600MHz





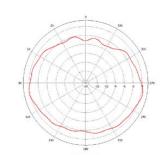


Typical H-Plane (700MHz)



Typical H-Plane (800MHz)

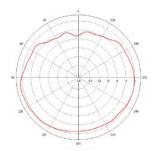
Typical H-Plane (900MHz)

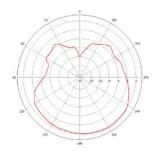


Typical H-Plane (1.7GHz)

Typical H-Plane (1.9GHz)







All pattern and gain measurements taken on a 400 x 400mm (2' x 2') ground plane without additional cable.

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