



# High Gain All Band Cellular LPDA Antenna

**COMM-CO**  
Communication today and tomorrow

Operating Frequency: 694-1000MHz & 1500-3000MHz

Product Code: LPDA-A0092



This high gain wideband directional antenna covers all international cellular, mobile and wireless data bands including GSM 900/GSM1800/UMTS/LTE bands as well as extended cellular and WiMAX bands such as European/USA "Digital Dividend bands" and 2.3-2.7GHz licensed and unlicensed data bands. Its configuration is suitable for various wireless communications systems.

## Features:

- High gain
- Broadband – all cellular/LTE/Wireless data bands in 694MHz-3GHz range
- Easy alignment with main beam around 50 degrees wide
- Tremendous improvement on reliability of wireless data
- Robust and weatherproof
- Four year track record in all climate conditions from Nordic to desert to tropical

## Application areas:

- Fixed wireless voice and data applications
- M2M communications (ATMs, financial data processing, telemetry etc)
- Extending wireless data to weak signal areas (can extend connectivity range by factor of 3 or more)
- Enables rural and remote wireless service provision.

Standard	Frequency (MHz)
US Digital Dividend 700 MHz band	694 - 820
European Digital Dividend 800 MHz band (LTE)	790 - 862
TDMA/CDMA/AMPS	824 - 894
SM "GSM 900"	870 - 960
TACS Europe and Asia only	871 - 949
GSM 1800 / PCS/ PCN	1710 - 1880
GSM "GSM1900" USA and Canada only	1850 – 1990
DECT	1880 - 1900
PHS Japan, Taiwan and China only	1895 - 1918
UMTS	1990 - 2170
Licensed WiMAX/LTE bands	2300 - 2400
International ISM2.4 GHz band	2400 - 2500
Licensed WiMAX/LTE bands	2500 - 2700
3G Extension Band	2500 – 2690



## Specifications:

**Product Code:** A-LPDA-0092  
**EAN:** 6009693810556  
**Features:** 7 m HDF195 with SMA(m) connector

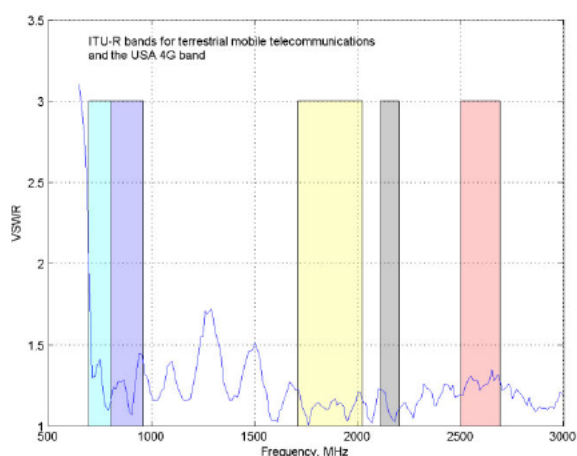
**Electrical**  
**Frequency (MHz)** 694 - 1000MHz  
 1500 - 3000MHz  
**Gain** 11dBi ( $\pm 0.5$ dB)  
**VSWR** <2.0:1

**Feed power handling** 10W  
**E-Plane 3 dB beamwidth**  $50^\circ (\pm 5^\circ)$   
**H-Plane 3 dB beamwidth**  $55^\circ (\pm 5^\circ)$   
**Front to back (F/B ratio)** 20dB ( $\pm 3$ dB)  
**Nominal input impedance** 50 Ohm  
**Polarisation** Linear

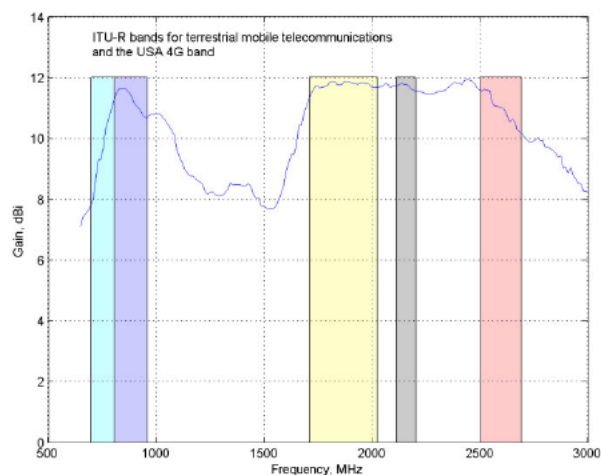
**Environmental**  
**Wind Survival** 160km/h  
**Temperature Range (Operating)**  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$   
**Shock** 40G at 10 msec  
**Thermal Shock**  $-40^\circ\text{C}$  to  $+70^\circ\text{C}$ : 10Cycles  
**Water Ingress Rating** IP65 (NEMA 4X)

**Mechanical**  
**Dimensions (lxwx d)** 1100 x 180 x 60mm  
**Weight** 1.29kg  
**Mounting bracket** Stainless steel up to 60 mm poles

## VSWR and Gain Patterns

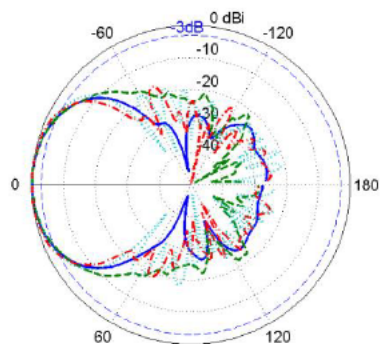


VSWR

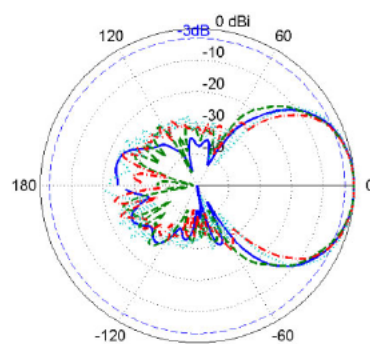
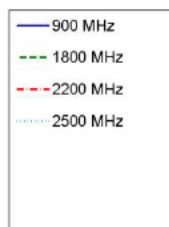


Gain

## Radiation Patterns



E-Plane



H-Plane

