

Original Perspectives Limited

is an independent research, design and development group with specific skills in electromagnetics research, development, modelling and consultancy; and the design and development of antennas.

Original Perspectives can supply a range of antennas to suit requirements, including higher gain antennas, lower profile antennas and antennas with a range of polarisations. Please contact us to discuss your requirements.

Data Sheet

Type BBD 0114-1 - The OPL broadband antennas can be customised for user requirements and further enquiries about variants are welcomed, the BBD 0114 is typical of the achievable bandwidths

Characteristic Performance

Original Perspectives' Broadband antennas cover a very wide bandwidth. BBD 0114-1 is a mast mountable, omni-directional (in the horizontal plane) antenna which operates from 100MHz to over 13GHz. Characteristics measured in conjunction with key Customers give an extremely impressive VSWR measurement, typically better than 2:1 over the full range. The measured omni-directional gain pattern compares favourably with narrower band antennas (c 2dbi gain over their operating bands) and exceeds their performance by continuing to operate well beyond the competitor products limited bandwidth. The BBD 0114-1 also has increased gain at higher frequencies. The BBD series is capable of design extension beyond its current band, and can be customised for applications below 100MHz and above 13GHz allowing variants of this antenna to be produced to suit individual requirements.

Frequency:	100MHz - >13GHz
VSWR:	Typically better than 2:1
Polarisation:	Linear Vertical
Approx. Height:	1030mm
Approx. Width	300mm
Approx. Weight	6.7kg

Operational Uses

Today's communication requirements are increasingly stringent, frequently demanding maximum bandwidth and optimum use of the frequency spectrum. The BBD 0114 is typical of Original Perspectives' multi-octave antenna coverage and is thus ideal for extremely wide broadband applications. In addition it can be used to replace a number of different antennas reducing multi-operational site requirements where the site of the antenna can have a drastic effect on antenna performance. Thus the fewer antennas needed to cover the required band the less the mutual interference and site location problems. The BBA0114 starts in the FM radio band covering the very wide range through the "sweet spot" encompassing TETRA, DECT, GSM, TY, 3G, WiFi, and microwave radio to 10GHz.

Major data transmission benefits from such an ultra wide bandwidth channel are
 Very fast pulse rise times
 Very low intersymbol interference
 Very high data signalling rates
 Very high information carrying capacity

Typical VSWR

OPL BBD 0114-1 VSWR Vs Frequency

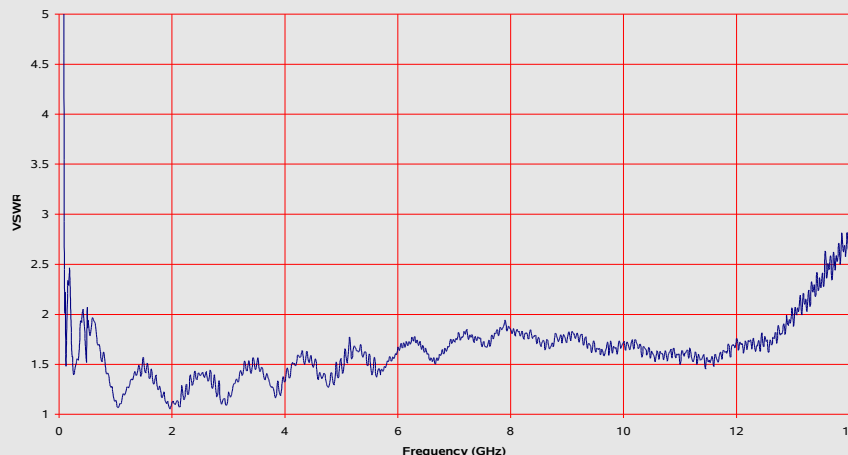
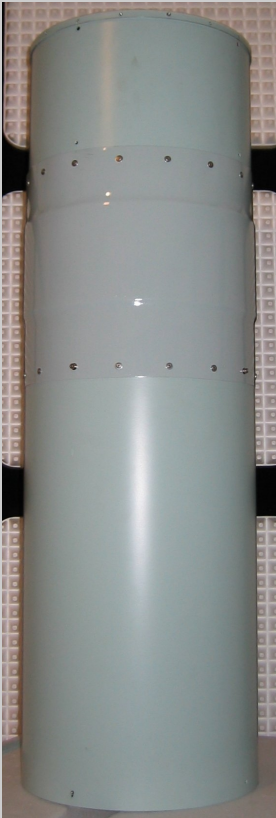


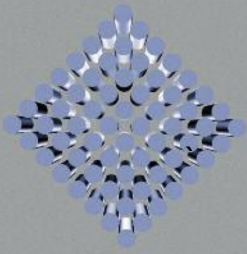
Figure 1 shows a typical VSWR of the BBD 0114-1

ORCHARD BUSINESS CENTRE
 STOKE ORCHARD
 CHELTENHAM
 GLOUCESTERSHIRE
 GL52 7RZ
 ENGLAND

T: +44 (0)1242 678 821

info@originalperspectives.com
 www.originalperspectives.com





Typical Patterns

