

# Wideband Omni-Directional VP Antenna

20 – 3600 MHz

Product Code: DIPL-A0035

VERSION: 3.5



## SPECIFICATIONS:

<b>Product codes:</b>		
DIPL-A0035	Full-band antenna, including low frequency whip sections for receive only applications.	
DIPL-A0035-01	Transmit/receive antenna without whip sections. Reduced frequency range.	
DIPL-A0035-02	DIPL-A0035-01 specified for maritime use (wind survival 182 km/h)	
DIPL-A0035-03	Kit of low frequency whip sections to convert DIPL-A0035-01/-02 to DIPL-A0035 or as use as spares.	
<b>Electrical:</b>		
	<b>DIPL-A0035</b>	<b>DIPL-A0035-01/-02</b>
Frequency range	20 – 3000 MHz 3000 – 3600 MHz (with increased H-plane pattern ripple)	100 – 3000 MHz 3000 – 3600 MHz (with increased H-plane pattern ripple)
VSWR	< 3:1 over 95% of band	< 3:1 over 95% of band
Nominal input imp.	50 Ω	50 Ω
Connector	N-type female	N-type female
Power handling	Receive only	500 W (100 – 1000 MHz) 150 W (1000 – 3600 MHz)
Gain (max)	See graph	See graph
Polarisation	Linear, vertical	Linear, vertical
<b>Mechanical:</b>		
	<b>DIPL-A0035</b>	<b>DIPL-A0035-01/-02</b>
Dimensions (l x w)	6 m x 2 m	0.9 m x 0.43 m (ant. only) 1.9 m x 0.43 m (incl. mount)
Total mass	24 ± 0.5 kg	10 kg (antenna) 3 kg (mounting pole)
Passivation	MIL-STD paint & powder coat	MIL-STD paint & powder coat
Colour	Per request	Per request
Material	Aluminium, fibreglass and stainless steel	Aluminium, fibreglass
Mounting	Al. flange 8 x 2/2/ M* bolts	Al. flange 8 x 2/2/ M* bolts
Eff. wind area	± 0.63 m <sup>2</sup>	± 0.22 m <sup>2</sup>
<b>Environmental: designed to meet the following specifications</b>		
Wind survival	160 km/h	
Temp operational	- 37 °C (no icing) to + 65 °C	
Temp storage	- 46 °C (no icing) to + 71 °C	
Corrosion	Appropriate anti-corrosion measures are taken in the design of antennas for harsh environmental conditions	
Degree of Enclosure	MIL-STD-810E, method 506.3, procedure I	
Humidity	MIL-STD-810E, method 507.4	
Fungus	MIL-STD-810E, method 508.5	
Salt fog	MIL-STD-810E, method 509.4	
Vibration (ground transportation)	MIL-STD-810E, method 514.4. cat 1	
Vibration (operation)	MIL-STD-810E type 1	
Shock	MIL-STD-810E, method 516.4, procedure I (20 g / 10 ms load in x, y and z direction)	

## PRODUCT DESCRIPTION:

The DIPL-A0035 is a wideband vertically polarised omni-directional antenna for receive and transmit applications. This antenna operates over the 20 to 3600 MHz frequency band with a VSWR of less than 3:1 over 95% of the band.

This unit can be operated as a DIPL-A0035-01, with high-power transmit capabilities, by removing the whips. The DIPL-A0035-01 can also be purchased separately.

The whip sections can be quickly detached and stowed in a bag provided for rapid antenna transport and redeployment if needed.

The antenna (both DIPL-A0035 and -01/-02 variants) is provided with a short, isolated, mounting pole for direct mount to a mast or structure.

A kit of spare whip sections can be purchased separately to convert a DIPL-A0035-01 to a DIPL-A0035 or replace whip sections that may have been damaged while in use.

## PRODUCT FEATURES:

- Wideband, lightweight and waterproof
- Omni-directional azimuth pattern
- Distributed loading is used to prevent elevation radiation pattern break up
- Quick assembly

# Wideband Omni-Directional VP Antenna

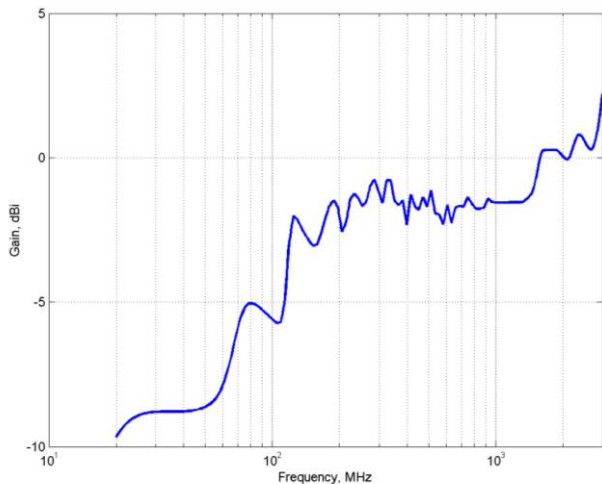
20 – 3600 MHz

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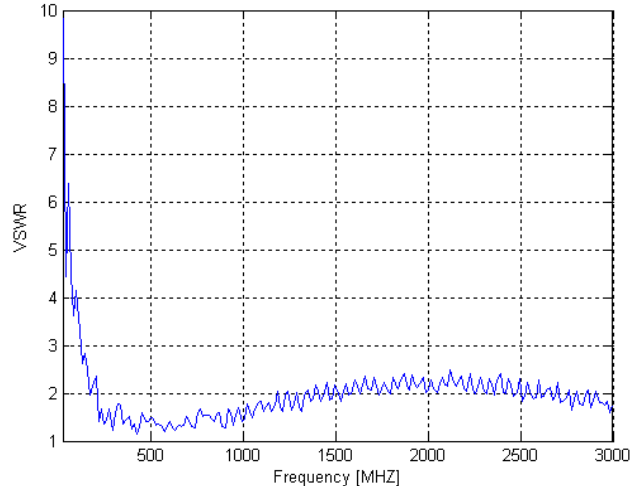
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## VSWR AND GAIN GRAPHS:

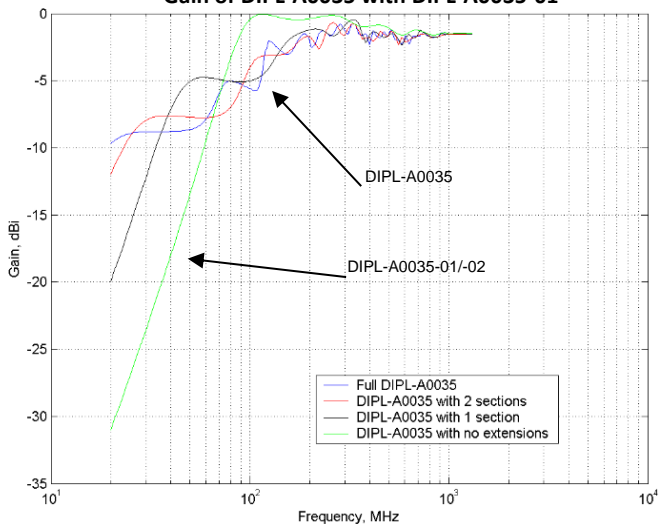
Gain of DIPL-A0035



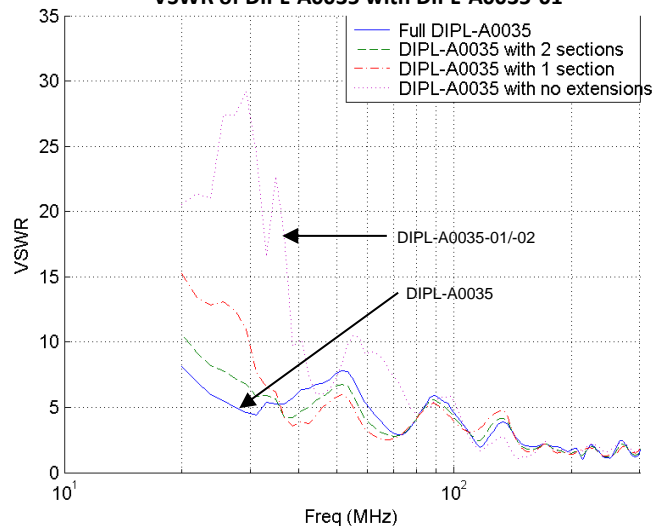
VSWR of DIPL-A0035



Gain of DIPL-A0035 with DIPL-A0035-01



VSWR of DIPL-A0035 with DIPL-A0035-01



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**GAIN THE ADVANTAGE**

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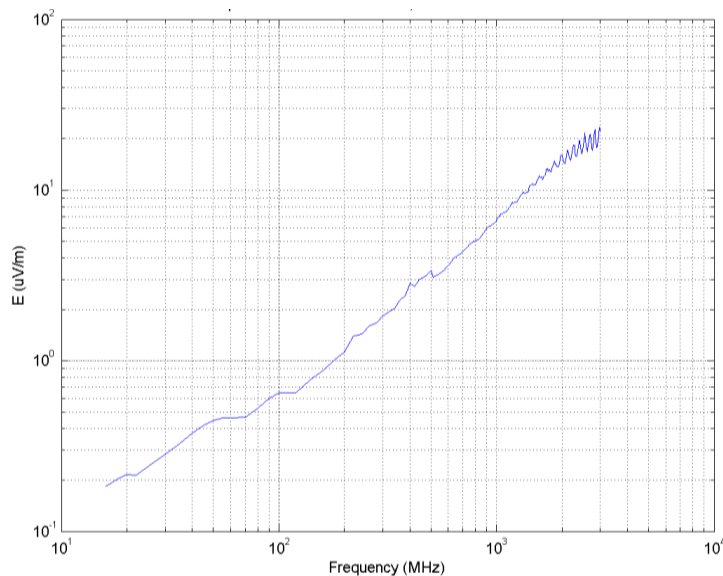
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## SENSITIVITY GRAPH:

Sensitivity of the DIPL-A0035 antenna. This graph shows the minimum signal that can be detected by the antenna, in a bandwidth of 1 kHz, with a receiver noise figure of 9 dB.



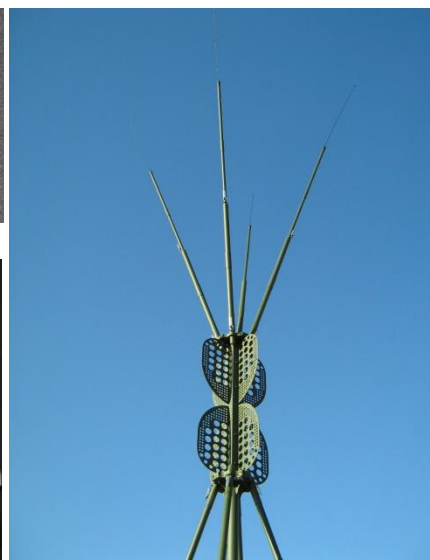
## PRODUCT IMAGES:



DIPL-A0035-01/02



DIPL-A0035-03



DIPL-A0035



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