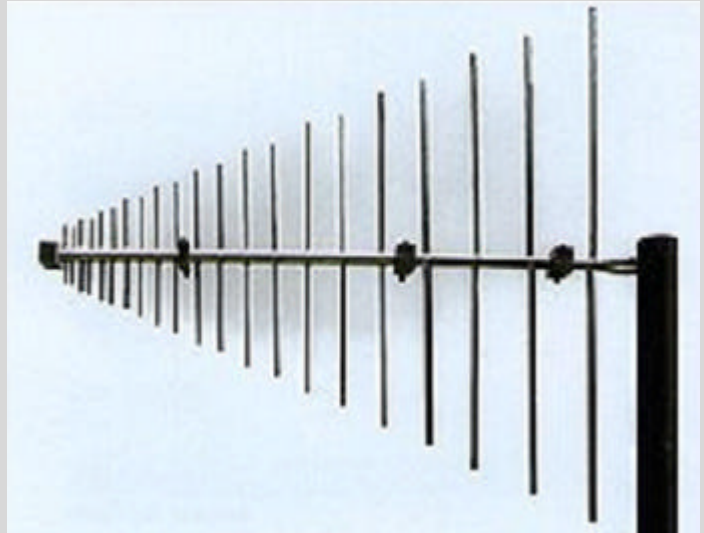




# Arkonia Systems Limited

## ARK7500 SERIES OF SINGLE POLARISED LOG PERIODIC ANTENNAS

- ▲ *20MHz to 1100MHz (extendable)*
- ▲ *Rugged Stainless Steel construction*
- ▲ *High Gain: 8dBi*
- ▲ *Constant Beamwidth/Input Impedance*



The Arkonia Systems ARK7500 series of Single Polarised Logarithmic Periodic Antennas (SPLPA) are high quality broadband antennas, suitable for either reception or transmission.

The stainless steel, robust, corrosion resistant construction allows these antennas to operate in severe and extreme environments with minimal maintenance.

Larger elements and tip-section are detachable for ease of transportation and storage.

The ARK7500 series are currently deployed in both land and maritime communications and signals monitoring applications.

### *Options:*

- ▲ *Dual Polarisation (ARK7550 Series)*
- ▲ *Dielectric Mounting Clamp*
- ▲ *Extended freq. coverage to 1.5GHz*
- ▲ *High Power 2KW continuous wave*

A variety of further options and accessories are available including alternative frequency ranges, masts, rotators, preamplifiers, multicouplers and switching matrices.

## Specifications

### Electrical:

<b>Polarisation</b>	Single Plane
<b>Frequency Range</b>	As defined below
<b>V.S.W.R.</b>	2.25:1 maximum
<b>Gain</b>	8dBi typical
<b>Front to back ratio</b>	18dB typical
<b>Cross Polarisation Isolation</b>	18dB typical
<b>Beamwidth (3dB)</b>	65 degrees E-plane/110 degrees H-plane - typical
<b>RF Connectors</b>	N type socket
<b>Max Input Power</b>	500 watts c.w. at 1GHz

### Mechanical:

<b>Material</b>	Stainless Steel
<b>Finish</b>	Epoxy Paint – Dawn Grey
<b>Size and Weight</b>	See below

### Environmental:

<b>Wind Survival</b>	145km/h (90 mph) with 1.27cm (0.5 inch) radial ice
<b>Shock and Vibration</b>	Qualification can be provided on request

### Notes

1. The antennas specified are the preferred Arkonia Systems range. Alternatives are available on request
2. With intermediate frequency coverage, higher power and narrower Beamwidth.
3. The wind area is calculated with 1.27cm (0.5 inch) of radial ice.
4. See below for mounting arrangement details. Alternatives are available on request.
5. A variety of dielectric masts and rotators are available on request.

### Mounting Arrangement:

Mounting Description	Typical Antenna Freq. Range
Mid Mounting	20 – 1100 MHz to 180 – 1100MHz
End Mounting	250 – 1100 MHz to 500 – 1100MHz

Standard Type No.	Freq Range MHz	Dimension A Metres	Dimension B Metres	Approx Weight Kg	Approx Wind Area M <sup>2</sup>	Standard Mounting
ARK7519	20 - 1100	6.70	5.40	50.0	2.51	MID
ARK7520	30 – 1100	6.25	5.20	45.0	2.50	MID
ARK7521	40 – 1100	5.00	4.11	35.0	1.91	MID
ARK7522	50 - 1100	4.20	3.30	24.0	1.44	MID
ARK7523	70 – 1100	2.90	2.35	12.0	0.94	MID
ARK7523-4	90 – 1100	2.35	1.88	10.0	0.71	MID
ARK7524	100 – 1100	2.10	1.68	9.0	0.61	MID
ARK7525	120 - 1100	1.70	1.34	5.0	0.46	MID
ARK7525-8	140 - 1100	1.50	1.18	4.6	0.40	MID
ARK7526	180 - 1100	1.10	0.87	3.8	0.30	MID
ARK7527	250 - 1100	0.90	0.68	3.2	0.22	END
ARK7528	500 - 1100	0.47	0.35	2.5	0.18	END
ARK7529	220 - 440	0.75	0.78	2.5	0.22	END

## FOR FURTHER TECHNICAL INFORMATION REQUEST: PRODUCT SPECIFICATION



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