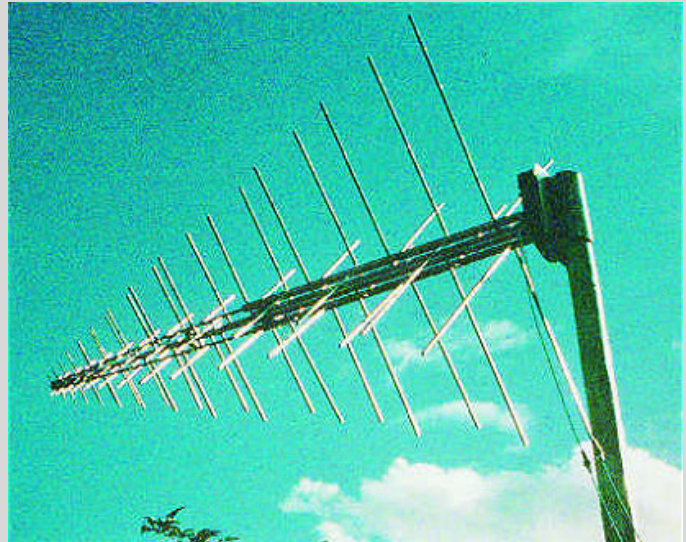




Arkonia Systems Limited

ARK7550 SERIES OF DUAL POLARISED LOG PERIODIC ANTENNAS

- ▲ 30MHz to 1100MHz (extendable)
- ▲ Rugged Stainless Steel construction
- ▲ High Gain: 8dBi
- ▲ Constant Beamwidth/Input Impedance



The Arkonia Systems ARK7550 series of Dual Polarised Logarithmic Periodic Antennas (DPLPA) 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 ARK7550 series are currently deployed in both land and maritime communications and signals monitoring applications.

Options:

- ▲ Single Polarisation (ARK7500 Series)
- ▲ Circular Polarisation
- ▲ Dielectric Mounting Clamp
- ▲ Extended freq. coverage 20MHz-1500MHz
- ▲ 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:

Polarisation	Dual Plane
Frequency Range	As defined overleaf
V.S.W.R.	2.25:1 maximum
Gain	8dBi typical
Front to back ratio	18dB typical
Cross Polarisation Isolation	18dB typical
Beamwidth (3dB)	65 degrees E-plane/110 degrees H-plane - typical
RF Connectors	N type socket
Max Input Power	500 watts c.w. at 1,000 MHz

Mechanical:

Material	Stainless Steel
Finish	Epoxy Paint – Dawn Grey
Size and Weight	See overleaf

Environmental:

Wind Survival	145km/h (90 mph) with 1.27cm (0.5 inch) radial ice
Shock and Vibration	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. Dual polarised antennas can be treated as two separate antennas at mutual right angles. Both of these has a separate RF Connector and retains the beam shape of a single plane polarized antenna. For reception of circularly polarised signals, a 90-degree hybrid combiner is required, details of which can be supplied on request.
6. A variety of dielectric masts and rotators are available on request.

Mounting Arrangement:

Mounting Description	Typical Antenna Freq. Range
Mid Mounting	30 – 1100 MHz to 140 – 1100MHz
End Mounting	180 – 1100 MHz to 500 – 1100MHz

Standard Type No.	Freq Range MHz	Dimension A Metres	Dimension B Metres	Approx Weight Kg	Approx Wind Area M ²	Standard Mounting
ARK7554	30 – 1100	6.25	5.20	82.0	2.75	MID
ARK7555	40 – 1100	5.00	4.11	70.0	2.10	MID
ARK7556	50 - 1100	4.20	3.30	48.0	1.58	MID
ARK7557	70 – 1100	2.90	2.35	29.0	1.03	MID
ARK7558	90 – 1100	2.35	1.88	20.0	0.78	MID
ARK7558-6	100 – 1100	2.10	1.68	19.0	0.67	MID
ARK7559	120 - 1100	1.70	1.34	10.0	0.51	MID
ARK7559-8	140 - 1100	1.50	1.18	9.5	0.4	MID
ARK7560	180 - 1100	1.10	0.87	7.5	0.33	END
ARK7560-10	200 - 1100	1.05	0.80	7.0	0.28	END
ARK7561	250 - 1100	0.90	0.68	6.0	0.24	END
ARK7562	500 - 1100	0.47	0.35	5.0	0.20	END
ARK7563	220 - 440	0.75	0.78	5.0	0.24	END

FOR FURTHER TECHNICAL INFORMATION REQUEST: PRODUCT SPECIFICATION



ARKONIA SYSTEMS LIMITED
SIGNAL HOUSE
35 WOOLMER WAY
BORDON, HAMPSHIRE
GU35 9QE, ENGLAND
T: +44 (0) 1420 488 646
F: +44 (0) 1420 477 845
E: commercial@arkonia.co.uk
WEB: www.arkonia.co.uk

This publication is issued to provide outline information only and (unless specifically agreed to the contrary by the Company in writing) is not to be copied or to form part of any order or contract or to be regarded as a representation relating to the product or services concerned. Any applications of products shown in this publication are for illustration purposes only and do not give or imply any licences or rights to use the information for any purposes whatsoever. It is the responsibility of any person who wishes to use the application information to obtain a licence for such use. We reserve the right to alter without notice the specification, design or conditions of supply of any products or service.