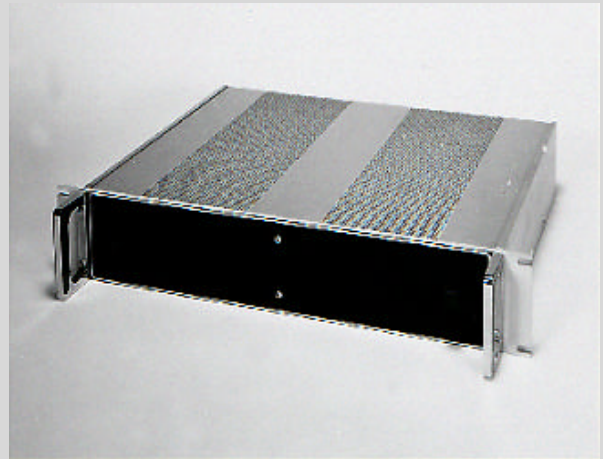




# Arkonia Systems Limited

## HF, VHF-UHF WIDEBAND RECEIVING MULTICOUPLERS

- ▲ **Large range of standard models**  
*Three series cover HF, VHF and V/UHF frequency bands*
- ▲ **Wide dynamic range**  
*Achieved by the use of specially developed high intercept low noise amplifier technology*
- ▲ **Wide range of outputs**  
*1x8, 1x6, 2x8, 2x16, 3x8, and 4x8 output combinations are available from standard models*
- ▲ **High input signal protection**  
*All HF models are protected against 1KV input Spikes*
- ▲ **High isolation**  
*Good output to output to input isolation is achieved in all models*
- ▲ **Excellent performance**  
*Specially designed power supplies ensure exceptionally low conducted and radiated RFI*



The Arkonia Systems standard range of broadband receiver multicouplers provide optimum coupling between a single antenna and either eight or sixteen receivers without degradation of receive performance. The complete range is divided into three separate series: 743, 746 & 748.

The basic multicoupler in each of the three series provide eight receiver outputs from a single antenna input and is housed in a standard 483mm (19 inch) rack-mounted unit having a panel height of 88 mm (2U)

The basic of the ARK7430 Series of HF Multicouplers is the well proven ARK7034 High Intercept HF Amplifier which uses state of the art VMOS technology to achieve an extremely linear response and lower intermodulation products which is important

when handling high level HF signals that may generate spurious products within the pass-band of the amplifier.

The ARK7460 Series and ARK7480 Series of VHF and V/UHF Multicouplers use low noise, high intercept amplifiers to achieve a wide dynamic range of operation whilst still retaining extremely low intermodulation products in the presence of high level interference signals.

## Typical Specifications

	HF	VHF	V/UHF
Parameter	ARK7430-18	ARK7460-18	ARK7480-18
Frequency (MHz)	1.0-30 min. (0.5-35 typical)	10-500 min.	20-1000 min.
No. of Inputs	1	1	1
No. of Outputs	8	8	8
Overall Gain (dB)	2 min.	1 min.	0 min.
Gain Variation (dB)	2 max.	2 max	4 max.
Input Noise Figure (dB)	5.5 max.	9 max. (7.5 typical)	10.5 max. (8.5 typical)
Input/Output VSWR (50 ohm)	1.5:1 max.	2.1 max.	2.5:1 max.
OPIP – 3 <sup>rd</sup> Order (dBm)	38 min.	30 typical	28 typical
Max. I/P for rated OPIP (dBm)	0	-10	-10
(2 equal level tones)			
Input for 1dB comp. (dBm)	18 min	13 min	13 min
Max. C.W. Input Signal	30 Vrms for 5 Mins.	-	-
Max Peak Signal	1 KV @ 1.6 microsec. risetime	-	-
Isolation: OP- OP (dB)	30 min.	28 min.	24 min.
Isolation: OP- IP (dB)	25 min.	27 min.	27 min.
Weight (kg)	6	6	6
Width mm (inch)	483 (19")	483 (19")	483 (19")
Height mm (inch)	88 (3.46)	88 (3.46)	88 (3.46)
Depth mm (inch)	384 (15.1)	384 (15.1)	384 (15.1)
Temperature Operating (°C)	0 to +50	0 to +50	0 to +50
Temperature Storage (°C)	-30 to +70	-30 to +70	-30 to +70
Connectors RF Input	N type	N type	N type
Connectors RF Output	BNC type	BNC type	BNC type
Connectors Supply	IEC Plug	IEC Plug	IEC Plug
Power Supply (V)	115/230V	115/230V	115/230V
	±10% 50/60Hz	±10% 50/60Hz	±10% 50/60Hz
Power Consumption (Watts)	50 max.	50 max.	50 max.

## Product Numbers

	HF	VHF	V/UHF
Function	1MHz to 30 MHz	10MHz to 500MHz	20MHz to 1000MHz
1x 8-way multicoupler in 19" rack	ARK-7430-18	ARK-7460-18	ARK-7480-18
1x 16-way multicoupler in 19" rack	ARK-7430-116	ARK-7460-116	ARK-7480-116
2x 8 way multicouplers in 19" rack	ARK-7430-28	ARK-7460-28	ARK-7480-28
2x 16 way multicouplers in 19" rack	ARK7430-216	ARK-7460-216	ARK-7480-216
3x 8-way multicouplers in 19" rack	ARK7430-38	ARK-7460-38	ARK-7480-38
4x 8-way multicouplers in 19" rack	Not available	ARK-7460-48	ARK-7480-48

FOR FURTHER TECHNICAL INFORMATION REQUEST: PRODUCT SPECIFICATION



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