

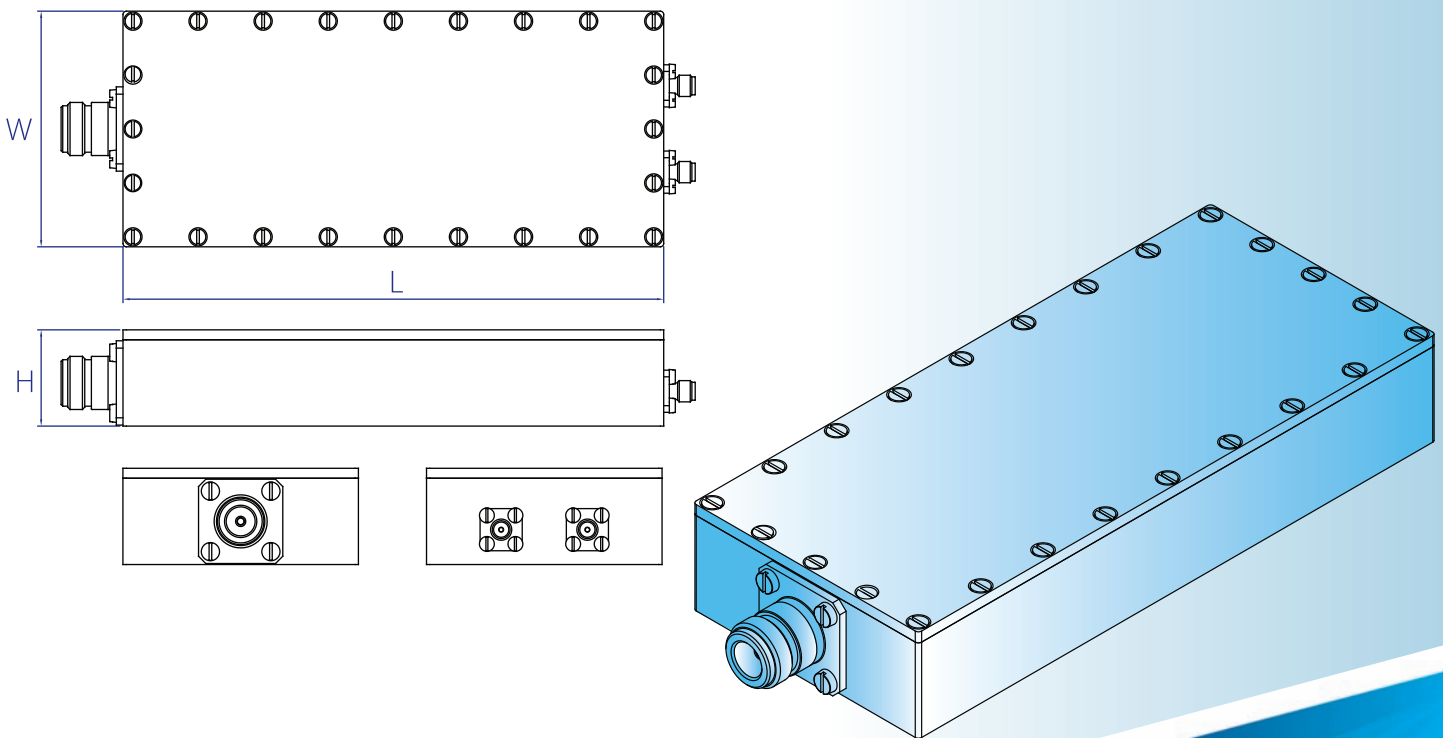
# Power divider/combiner

These resistor-less power divider/combiners have the same power handling performance whether they are used as dividers or combiners.

The return loss depends upon match of the attached stages to each of the ports. If all ports are attached to 50ohm impedance then the return loss of the power divider/combiner is better than 20dB.

When used as a power divider the power is split equally between all outputs so long as the subsequent stages are 50ohm impedance.

When used as a power combiner the insertion loss is extremely low so long as all of the input signals are coherent and in-phase. As any phase difference increases, so will both the insertion loss and the return loss.



## SPECIFICATIONS

### 2-WAY POWER DIVIDER/COMBINERS

Part Number	Bandwidth (MHz)	Loss (dB)	Max Power (Watts)	Dimensions (mm) L x W x H
2Y-200-1000	200-1000	0.25dB	300W	163 x 71 x 29
2Y-200-1000N	200-1000	0.25dB	500W	163 x 71 x 29
2Y-350-2200	350-2200	0.3dB	300W	92 x 71 x 29
2Y-350-2200N	350-2200	0.3dB	500W	92 x 71 x 29
2Y-700-2500	700-2500	0.2dB	300W	49 x 71 x 29
2Y-700-2500N	700-2500	0.2dB	500W	49 x 71 x 29
2Y-800-6000	800-6000	0.3dB	300W	40 x 71 x 29
2Y-800-6000N	800-6000	0.3dB	400W	40 x 71 x 29
2Y-1600-10000	1600-10000	0.3dB	260W	25 x 71 x 29
2Y-1600-10000N	1600-10000	0.3dB	260W	25 x 71 x 29

N-suffix indicates all N-Type female connectors. No suffix indicates N-Type female on common port with sma female on other ports. All parts amplitude balance <math>\pm 0.1\text{dB}</math> phase balance

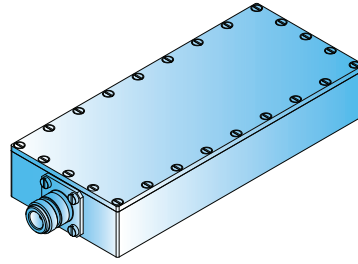
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# Power divider/combiner continued



## SPECIFICATIONS

### 3-WAY POWER DIVIDER/COMBINERS

Part Number	Bandwidth (MHz)	Loss (dB)	Max Power (Watts)	Dimensions (mm) L x W x H
3Y-200-1000	200-1000	0.3dB	450W	163 x 97 x 29
3Y-200-1000N	200-1000	0.3dB	500W	163 x 97 x 29
3Y-350-2200	350-2200	0.35dB	450W	92 x 97 x 29
3Y-350-2200N	350-2200	0.35dB	500W	92 x 97 x 29
3Y-700-2500	700-2500	0.3dB	450W	49 x 97 x 29
3Y-700-2500N	700-2500	0.3dB	500W	49 x 97 x 29
3Y-800-6000	800-6000	0.35dB	400W	40 x 97 x 29
3Y-800-6000N	800-6000	0.35dB	400W	40 x 97 x 29
3Y-1600-10000	1600-10000	0.35dB	270W	25 x 97 x 29
3Y-1600-10000N	1600-10000	0.35dB	270W	25 x 97 x 29

N-suffix indicates all N-Type female connectors. No suffix indicates N-Type female on common port with sma female on other ports. All parts amplitude balance <math>\pm 0.1\text{dB}</math> phase balance  $0^\circ \pm 1^\circ$

### 4-WAY POWER DIVIDER COMBINERS

Part Number	Bandwidth (MHz)	Loss (dB)	Max Power (Watts)	Dimensions (mm) L x W x H
4Y-200-1000	200-1000	0.3dB	500W	163 x 123 x 29
4Y-200-1000N	200-1000	0.3dB	500W	163 x 123 x 29
4Y-350-2200	350-2200	0.35dB	500W	92 x 123 x 29
4Y-350-2200N	350-2200	0.35dB	500W	92 x 123 x 29
4Y-700-2500	700-2500	0.3dB	500W	49 x 123 x 29
4Y-700-2500N	700-2500	0.3dB	500W	49 x 123 x 29
4Y-800-6000	800-6000	0.4dB	400W	40 x 123 x 29
4Y-800-6000N	800-6000	0.4dB	400W	40 x 123 x 29
4Y-1600-10000	1600-10000	0.4dB	270W	25 x 123 x 29
4Y-1600-10000N	1600-10000	0.4dB	270W	25 x 123 x 29

The power rating of these devices is usually limited by the connectors used.

We use the following recommended maximum power ratings:

Connector	Maximum power
sma	150Watts
N-Type	500Watts

If you would like a higher power unit then we can offer a range of alternative connectors, such as DIN7-16. These will impact upon the size of the housing and possibly on the upper frequency limit. Please contact us to discuss your requirement.

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