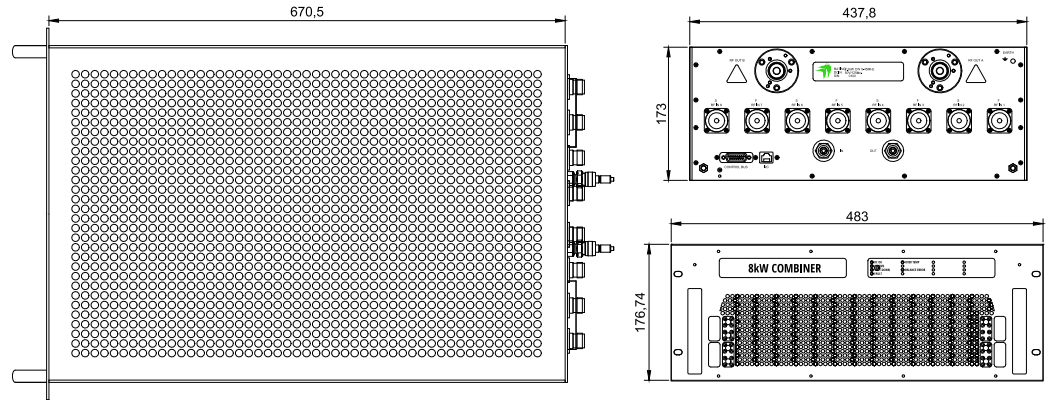


## Dual 4:1 8kW 90-Degree Combiners



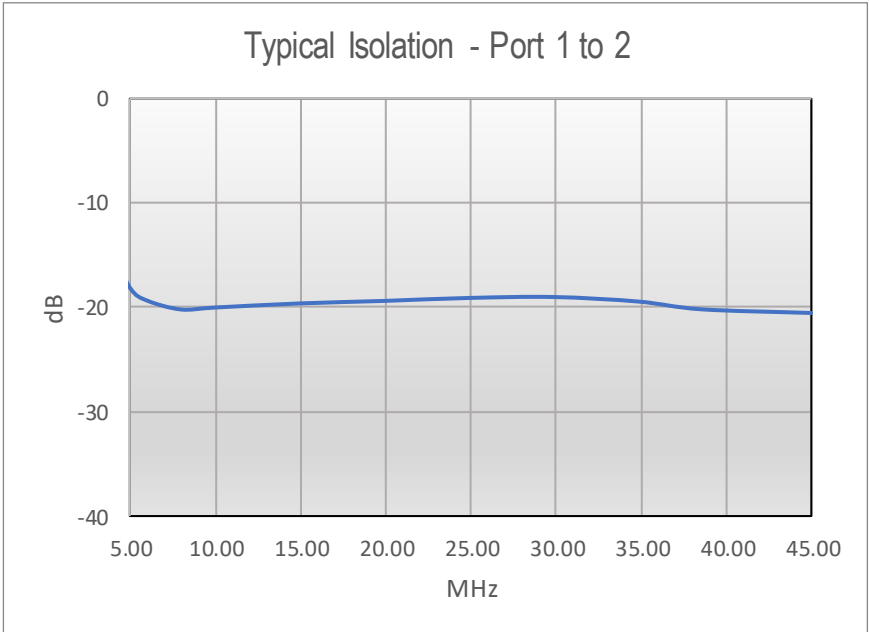
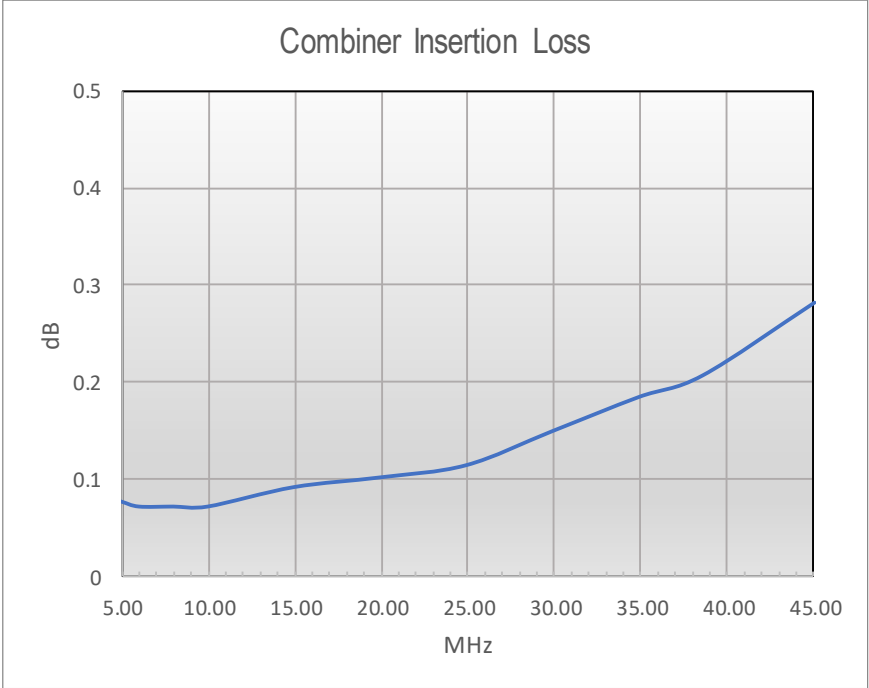
### HIGHLIGHTS

- ◆ 5-45MHz Broadband Capable
- ◆ 90+/-4 Degrees Inputs, 5-32MHz
- ◆ Matching small signal 90 degree delay module is available to ensure phase compatibility from 0 to > 50MHz.
- ◆ Low Insertion Loss
- ◆ Good isolation
- ◆ Water cooled balance loads
- ◆ 7/8 EIA outputs
- ◆ Fail-safe protection
- ◆ Remote monitor interface

ITEM	SPECIFICATION	NOTES
<b>Model</b>	SRF8KCMB82-90	
<b>Power</b>	8kW x 2 outputs	Each 4:1 combiner is independent.
<b>Type</b>	90 degree combining	An external input cable length difference is used to implement part of the phase shifting network. This provides the opportunity to minimise overall system cable lengths.
<b>Frequency Range</b>	5- 32 MHz Normal Operation 32-45 MHz Extended Operation	De-rate linearly to half power from 32-45 MHz.
<b>Insertion Loss</b>	<0.2dB (0.1dB typ.) 5-32MHz	See graph
<b>Isolation</b>	>17dB (20dB typ.) 5-32MHz	Output terminated in 50Ω See graph
<b>Un-balance Handling</b>	Operates continuously with at least one missing input from each 8kW combiner.	Protected against excessive unbalance power by asserting SHUTDOWN line.
<b>Monitoring</b>	Unbalance resistor voltages and temperatures.	Available via I2C bus.
<b>Output Match</b>	Return Loss >25dB 5-32MHz	Inputs terminated in 50Ω. See graph
<b>Output Coupler</b>	Optional internal dual coupler available for each output.	See SRF8KCPL datasheet for specifications
<b>Physical</b>	19" x 4RU x 673mm chassis	
<b>Inputs</b>	8x 7-16 Female	
<b>Outputs</b>	2x 7/8 EIA flange	
<b>Interface</b>	D15 female parallel interface RJ45 I2C interface	
<b>Cooling</b>	Requires > 2lpm clean potable water, up to 40°C. Swagelok no-leak quick disconnect valves.	Combiner can operate safely with up to 50°C water for short periods.

Note: Specifications may change as product evolves. Confirm with factory before order for any critical specifications.

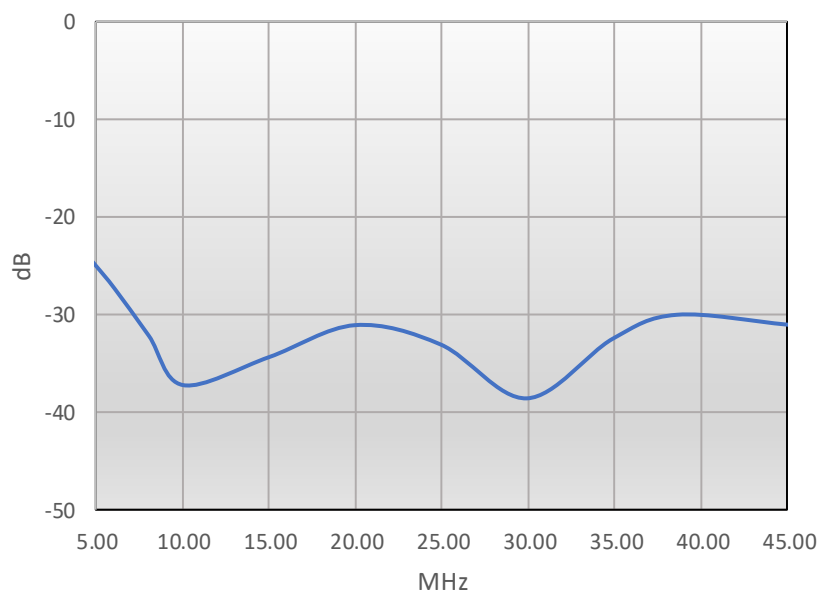




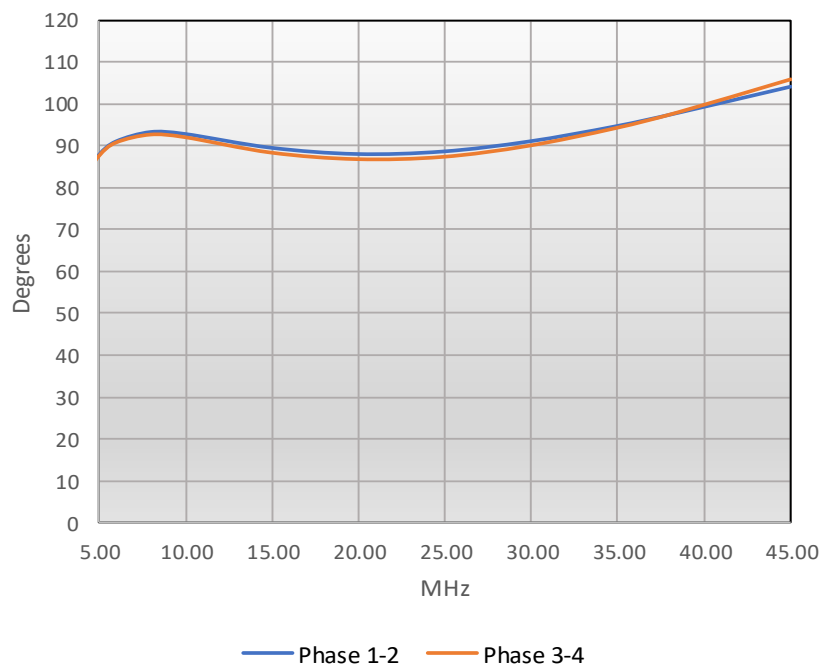
Note: Specifications may change as product evolves. Confirm with factory before order for any critical specifications.



### Typical Output Return Loss



### Phase Difference



\* Phase difference includes an extra 1.1m RG401 cable to the even inputs relative to the odd inputs.

Note: Specifications may change as product evolves. Confirm with factory before order for any critical specifications.

