

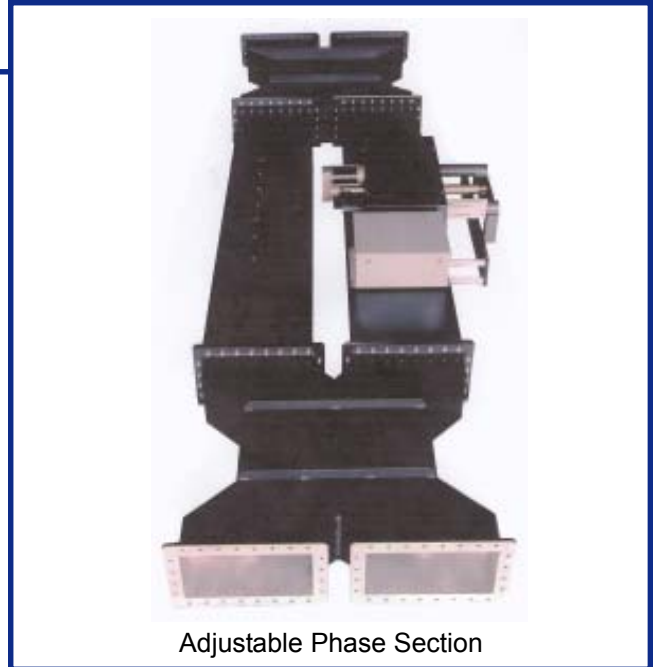


WAVEGUIDE *HOT SWITCH*™ POWER COMBINER

- Switches under power
- Prevents loss of air time
- Easy system integration
- High Power Handling
- Low Loss

The MCI *Hot Switch*™ provides three combining modes for dual, phase locked, high power amplifiers (HPAs) with distribution of the combined power to two outputs, typically antenna and load. Should one HPA fail, the *Hot Switch*™ redirects, on command, the remaining HPA to the desired output port with no loss of airtime. This unit is recommended as standard equipment in new systems as a replacement for fixed hybrids, magic tees and in systems that cannot be switched under power.

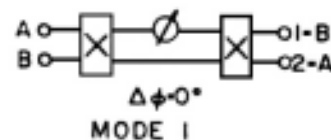
The *Hot Switch*™ is composed of two waveguide hybrids connected by parallel waveguide runs, one of which includes a motor driven dialectic phase shifter. A microprocessor based position controller drives the phase shifter and enables easy integration with the transmitter combining system. Multiple *Hot Switch*™ combiners may be integrated with a single master controller for systems with additional HPAs and/or antennas.



Adjustable Phase Section

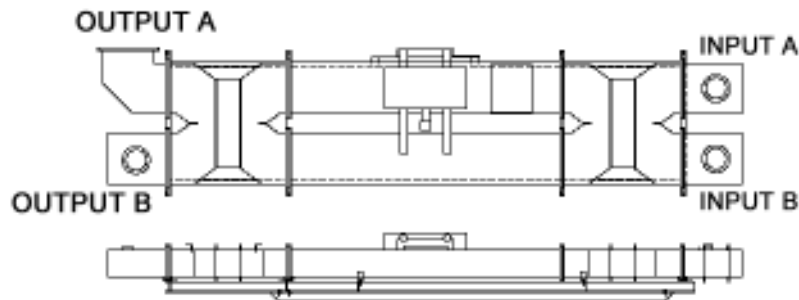
Every *Hot Switch*™ is optimized for the intended channel in order to provide the lowest possible VSWR and highest possible transmitter isolation throughout all intermediate and terminal states. MCI also offers low-power and super-power versions of the *Hot Switch*™ that uses non-contacting short circuits in the phase shifter sections.

MODE	INPUT	$\Delta \phi$	OUTPUT
1	A or B	0°	A →2, B → 1
2	A →B	90°	A + B →2, ISO →1
3	A or B	180°	A →1, B →2





SPECIFICATIONS	
VSWR:	< 1.08
Insertion Loss:	< 0.1 dB
Input Isolation:	> 35dB
Switching Time	< 8 seconds



		UHF	
FREQUENCY	MHz	470-608	566-7
CHANNEL RANGE		14-36	30-5
MODEL		55069	5506
SIZE		WR1800	WR15
COMBINED OUTPUT POWER (Transmitters)		240kW	240k
SIZE (LxWxH) ft		16.6x4.5x3.5	15.5x4
	(m)	(5.06x1.37x1.07)	(4.72x1.22
WEIGHT	lbs	900	700
	(kg)	(408.24)	(317.5
INPUT FLANGE		6 1/8 EIA	6 1/8 E
OUTPUT FLANGE		6 1/8 EIA/ WG	6 1/8 EIA

All specifications are subject to change with

