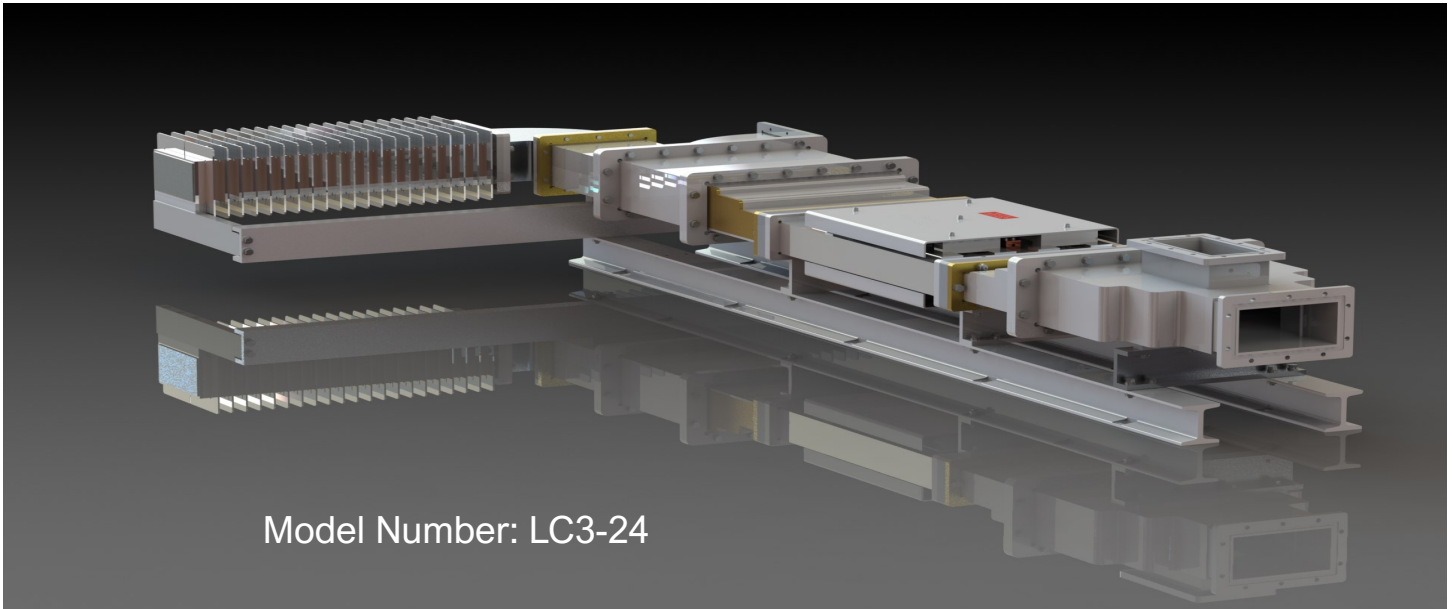


**WR650, Four Port Differential Phase Shift Circulator**



Model Number: LC3-24

Microwave Techniques has a broad range WR650, L-Band differential phase shifting circulators. Depending on power output and mismatch conditions, cooling can be performed either by air (natural convection or forced) or liquid. Unlike junction circulators, the output mismatch has no bearing on the input match as long as the isolated ports have well matched loads. For applications of high peak power, Microwave Techniques circulators can be pressurized with air, nitrogen or SF6.

The following specifications apply to a WR650, L-Band, 4-Port Differential Phase Shift Circulator:

Frequency	1215 to 1370 MHz
Peak Power	60 kW
Average Power	7.2 kW
VSWR Ports 1 & 3	$\leq 1.20$
VSWR Port 2	$\leq 1.12$
Insertion Loss - Port 1 to 2	$\leq 0.35$ dB
Insertion Loss - Port 2	$\leq 0.5$ dB
Isolation Port 1 to 3	$\geq 25$ dB
Isolation Port 2 to 1	$\geq 22$ dB

**Waveguide Pressurization:** 5 PSIG max

**Environments:** Land, Mobile, Naval and Airborne

**Application:** Air Traffic Control Radar Systems