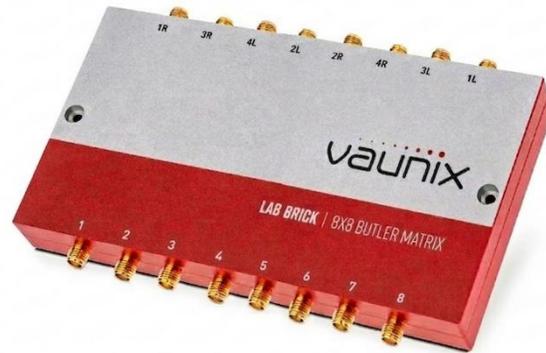


LBM-7250-8 Lab Brick® Butler Matrix

2400 – 7250 MHz Frequency | Butler Matrix 8x8

Features/Benefits

- Broad Frequency Range Covers all WiFi/WiFi6E Bands
- Excellent Phase Accuracy
- Front and Top Mounting Options
- Sized to fit multiple units into a single rack unit for ATE and laboratory applications



Applications

- Phased Antenna Array Beam Forming
- WiFi, WiFi6E, 5G, LTE, Bluetooth
- MIMO Simulation and Test
- Radar

The Lab Brick Butler Matrix is a cost-effective beam forming tool used with phased array antennas. Engineers use the Vaunix Butler Matrix to improve phase progression technology and address angular coverage issues by shaping radiation patterns and steering antenna array beams towards a desired direction in WiFi, WiFi6E, WiFi7, 5G, Bluetooth and other communication systems.

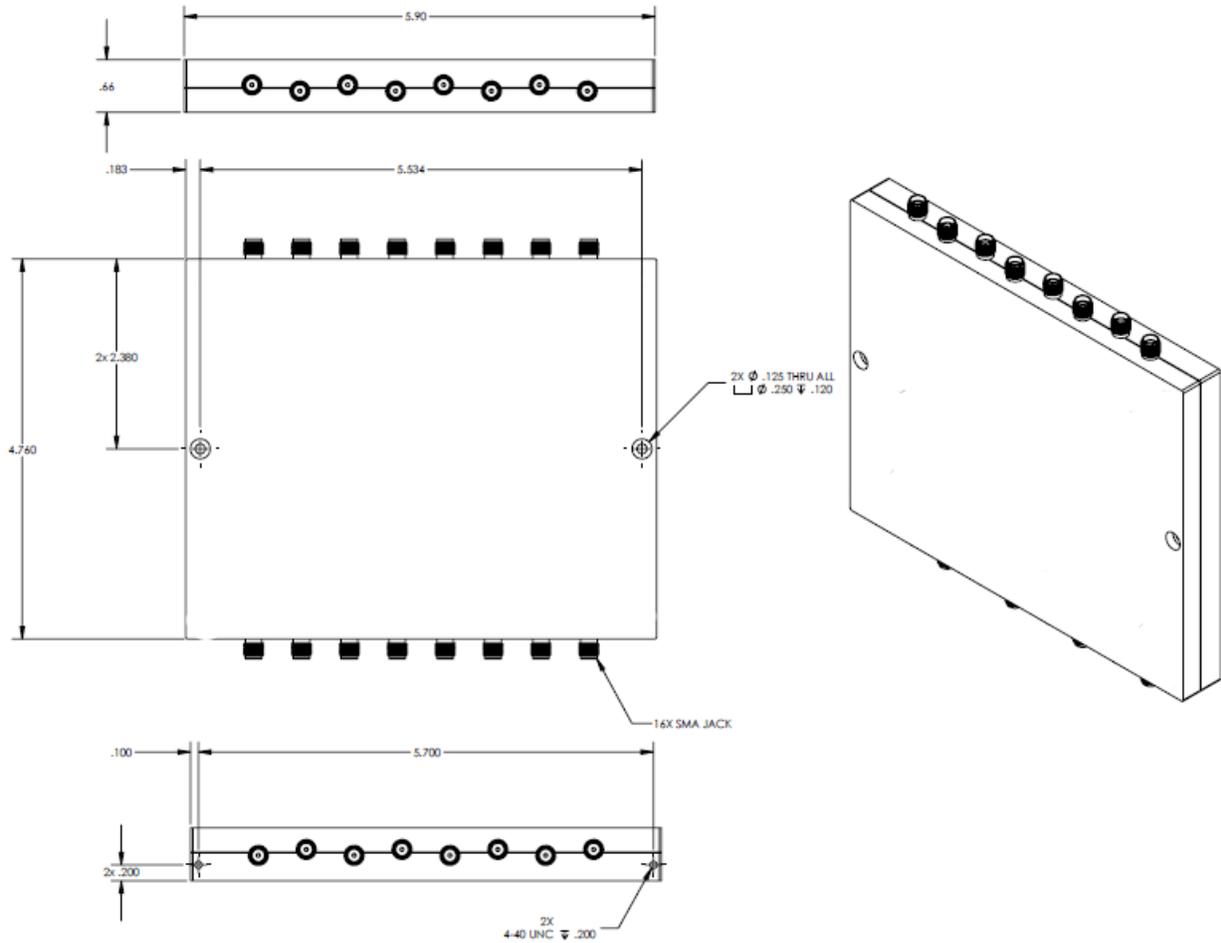
The LBM-7250-8 is a passive beam forming solution in a small, user-friendly package. The device can be mounted to a face plate with front access in a rack mount configuration. The LBM-7250-8 can also be mounted to a chassis from the top or bottom using the provided mounting holes.

LBM-7250-8 Specifications

<i>Parameter</i>	<i>Test Conditions</i>	<i>Min</i>	<i>Typ</i>	<i>Max</i>
Frequency Range (MHz)		2400		7250
Impedance (Ω)			50	
Insertion Loss (dB)			16	
Insertion Loss Variation (dB)			± 2	
Phase Accuracy (degrees)			± 20	
VSWR			1.5:1	
Isolation (dB)			15	
Maximum Input Level (Watts)	Peak		50	

<i>Parameter</i>	<i>Test Conditions/Notes</i>	
Environmental	Operating Temperature	-30 °C to +70 °C
	Relative Humidity (non-condensing)	<95%
Physical Connections	RF Connectors	SMA – female
Mechanical	Size	5.90 x 4.76 x 0.66 inches 149.9 x 120.9 x 16.8 millimeters
	Weight	0.3 lbs 136g

LBM-7250-8 Mechanical Outline



LBM-7250-8 Phase Mapping

	1	2	3	4	5	6	7	8
1L	-270	-247.5	-180	-157.5	-225	-202.5	-135	-112.5
3L	-202.5	-90	-112.5	0	-337.5	-225	-247.5	-135
4R	-180	-337.5	-90	-247.5	-135	-292.5	-45	-202.5
2R	-112.5	-180	-22.5	-90	-247.5	-315	-157.5	-225
2L	-225	-157.5	-315	-247.5	-90	-22.5	-180	-112.5
4L	-202.5	-45	-292.5	-135	-247.5	-90	-337.5	-180
3R	-135	-247.5	-225	-337.5	0	-112.5	-90	-202.5
1R	-112.5	-135	-202.5	-225	-157.5	-180	-247.5	-270

LBM-7250-8 Data

