



# MIMO Wireless Solutions

## PB24M24 / 58 and VLRM24 / 58

Moog Outdoor Wireless Solutions provide dual point-to-point / point-to-multi-point wireless surveillance flexibility in one package. An outdoor rugged Power Box, a MIMO (Multiple-Input-Multiple-Output) transmitter/receiver, and system setup software comprise the complete solution set. Utilizing revolutionary MIMO technology, Moog wireless kits employ multiple signal paths to address the channel limitations and multi-path fading associated with earlier wireless technologies. The result: high- throughput, via a reliable and cost effective wireless solution.

### Available Features

- Easy installation and setup
- Flexible deployment options
- Pole mount hardware included
- Wireless transmitter / receiver for IP cameras
- 120° sectional antennae (provided with receiver)
- Supports up to 150+ Mbps real TCPI / IP
- 300+ subs per receiver
- Low latency



# AUDIO VIDEO SUPPLY

## MIMO Wireless Solutions

### Models:

#### PB24M24

Rugged outdoor wireless box with a 110Vac (220Vac U.K.) input and 24Vac output for camera. Fuse protected with a wireless 2.4GHz MIMO transmitter. Directional antenna

#### PB24M58

Rugged outdoor wireless box with a 110Vac (220Vac U.K.) input and 24Vac output for camera. Fuse protected with a wireless 5.8GHz MIMO transmitter. Directional antenna

#### VLRM24

Wireless 2.4GHz MIMO access point, 110Vac input and 24V output

#### VLRM58

Wireless 5.8GHz MIMO access point, 110Vac input and 24V output



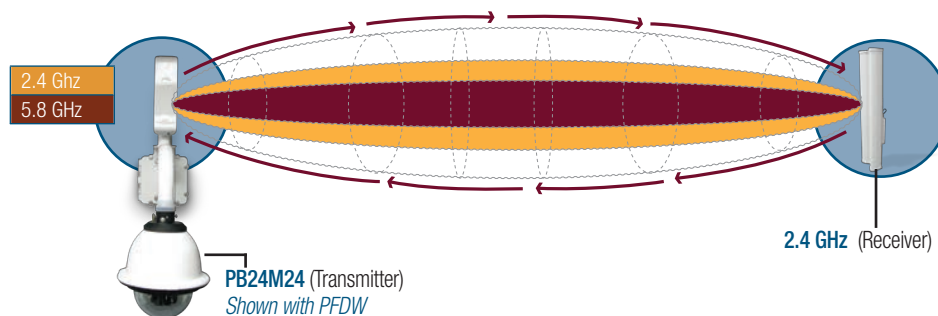
### Accessories:

#### VLH24 and VLH58

Hop extends beyond direct point-to-point applications. Comes with mounting bracket and directional MIMO antenna

### Consider the Line-of-Site (LOS) and the Fresnel Zone:

The illustration below demonstrates the properties of 5.8GHz vs. 2.4GHz. Simply put, 5.8GHz is a tighter band meant for greater distances, while 2.4GHz is less constricted by LOS but typically covers shorter distances



### 2.4GHz / 5.8GHz (PB24M Transmitter) Physical / Electrical Environmental Specifications

Size:	11.6" x 3.1" x 1.2" (29.4 x 8 x 3cm)	
Weight:	0.88 Lbs. (0.4 Kg.)	
Enclosure Characteristics:	Outdoor UV Stabilized plastic	
Mounting Kit:	Pole mounting kit included	
Max Power Consumption:	8 Watts	
Power Supply	2.4GHz:	24V, 0.5A surge protection integrated PoE adapter included
	5.8GHz:	15V, 0.8A surge protection integrated PoE adapter included
Power Method:	Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)	
Operating Temperature:	-30°C to 75°C	
Operating Humidity:	5 to 95% Condensing	
Shock and Vibration:	ETSI300-019-1.4	

(PB24M) Transmitter	2.4GHz	5.8GHz
Frequency Range:	2.41-2.46 GHz	5.74-5.82 GHz
Gain:	10.4-11.2 dBi	14.6-16.1dBi
Polarization:	Dual Linear	Dual Linear
Cross-pol Isolation:	23dB minimum	22dB minimum
Max VSWR:	1.6:1	1.6:1
Hpol Beamwidth (6dB):	55°	43°
Vpol Beamwidth (6dB):	53°	41°
Elevation Beamwidth:	27°	15°

### (PB24) Power Box

Size:	8.75" x 7.5" x 3.81" (222.3 x 190.5 x 96.8mm)
Weight:	10 Lbs. (4.54 Kg.)
Construction Back Box:	Rugged cast aluminum
Power Consumption:	1-Amp (120W) at 120Vac
Power Input:	110Vac U.S. (220Vac U.K.)
Power Output:	24Vac / 96VA
Operating Temperature:	-40°F to 122°F (-40°C to 50°C)

### 2.4GHz / 5.8GHz (VLRM) Physical / Electrical Environmental Specifications

Size:	6.3" x 3.1" x 1.1" (16 x 8 x 3cm)	
Weight:	1.1 Lbs. (0.5 Kg.)	
RF Connector:	2x RPSMA (Waterproof)	
Enclosure Characteristics:	Outdoor UV Stabilized plastic	
Mounting Kit:	Pole mounting kit included	
Max Power Consumption	2.4GHz:	6.5 Watts
	5.8GHz:	8 Watts
Power Supply:	24V, .5A PoE supply included	
Power Method:	Passive Power over Ethernet (pairs 4, 5+; 7, 8 return)	
Operating Temperature:	-30°C to 75°C	
Operating Humidity:	5 to 95% Condensing	
Shock and Vibration:	ETSI300-019-1.4	

(VLRM) Receiver	2.4GHz	5.8GHz
Frequency Range:	2.41-2.46 GHz	5.74-5.82 GHz
Gain:	15.0-16.0	15.0-16.0dBi
Polarization:	Dual Linear	Dual Linear
Cross-pol Isolation:	28dB minimum	22dB minimum
Max VSWR:	1.5:1	1.5:1
Hpol Beamwidth (6dB):	123°	137°
Vpol Beamwidth (6dB):	118°	118°
Elevation Beamwidth:	9°	8°
Electrical Downtilt:	4°	4°
ETSI Specification:	EN 302 326 DN2	EN 302 326 DN2
Dimensions:	27.6" x 5.7" x 3.7 (700 x 145 x 93mm)	14.4" x 2.5" x 1.6" (367 x 63 x 41mm)
Weight:	8.8 Lbs. (4.0 Kg.)	2.4 Lbs. (1.1 Kg.)
Windloading:	160 mph	120 mph

# MOOG

Sensor and Surveillance Systems