



## BWM Body Worn Mesh Radio

### Complete Bodyworn Video & Audio Mesh Radio For Tactical Applications

The BWM is a bespoke body worn mesh radio. BWM radios can be combined in a fluid self forming, self healing mesh containing up to sixteen radios. The BWM radios within the mesh exchange data on a single frequency, simplifying spectrum management. The entire mesh occupies just 6MHz of bandwidth and offers 8.9Mb/s of capacity.

BWM radios are available in either 100mW or 1W power levels. The radios employ a COFDM modulation scheme and therefore offer excellent RF penetration and performance in the presence of multipath. The 1W radio can operate over typical ranges of 500m in non line of sight environments or 10km where line of sight is available.

The BWM incorporates a mesh radio, integral rechargeable battery and control display into a rugged IP67 chassis. The battery can be charged in the unit using an external power input.

A general purpose ethernet interface is provided for connection to wider networks. There is also an optional WiFi module that allows the connection of standard WiFi enabled devices to the mesh radio network.

The BWM is supplied with a belt clip and can be worn at waist or chest level, it has a single quick release connector for interfacing to an IP camera and an audio headset. An optional chest harness is also available for shoulder mounting.

A dedicated HD 1920x1080p30 helmet camera is available to make a complete video & audio comms body worn solution.

At a glance status is available through the LEDs on the top of the unit. The control interface is via a comprehensive web browser.

AES encryption is available to ensure security of transmissions.

#### Overview

Tactical Mesh Radio

Excellent RF Performance

Integral Battery

IP Camera Input

Optional HD Head Camera

Supplied with Audio PTT Headset

WiFi Module Option

Body Worn Package

Chest or Shoulder Mounting

IP67 Sealed

Web Browser Control Interface

Optional AES Encryption



The BWM transmitter can be shoulder mounted or on the waist belt as shown in the example below.



The BWM transmitter can be connected to an optional head camera supplied by Visual Engineering.



The head camera has a Picatinny rail mount, allowing it to be connected directly to helmets equipped with a Picatinny rail.

The camera is a HD resolution (1920x1080) camera with an integral infra red LED for night time operation.

Part Number & Description			
BWM	L-Band	1Watt	110-8903

Specifications			
<b>Frequency Options</b>	L-Band: 1 to 1.5GHz S-Band: 2 to 2.5GHz	<b>Antennas</b>	Omni 2dBi Flexi Antenna, Vertically Polarised
<b>Modulation</b>	COFDM 360 Carrier	<b>Camera Connector</b>	19 pin Binder
<b>Sensitivity</b>	-96dBm	<b>Control Connector</b>	8 pin binder
<b>Bandwidth</b>	6MHz	<b>Audio Headset</b>	Headphone and PTT Microphone
<b>Capacity</b>	8.9Mb/s	<b>Optional Head Camera</b>	1920x1080 Resolution
<b>Range</b>	100mW 300m NLOS 2km LOS 1W 500m NLOS 10km LOS	<b>Typical Duration</b>	5 Hours (100mW) 3 Hours (1W)
<b>Optional Encryption</b>	AES128, AES256	<b>Optional WiFi</b>	5GHz
<b>Ethernet In</b>	10/100 BaseT with PoE	<b>Dimensions</b>	217 x 122 x 30mm
<b>Antenna Connections</b>	TNC Female	<b>Environmental</b>	IP67

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