

The M0CVO HW-20HP

The HW-20HP is an Off Centre Fed Dipole designed to operate on 20, 15, 12, 11 and 10m without an ATU and 17m and 6m with an ATU. It will handle up to 400W CW or 500W PEP*. Having a feedpoint at 1/3 of the way along instead of halfway along gives a feedpoint impedance of between 200 and 300Ω. This is not ideal for modern day transceivers requiring an antenna with a 50Ω impedance. Therefore, a 4:1 current balun is added at the feedpoint to alter the impedance to something closer to the 50Ω required. This then allows the antenna to be fed using standard 50Ω coaxial cable such as RG8 or RG213.

The overall length of the antenna is 10.14m or 33'. It may be mounted horizontally, as a sloper, or as an inverted vee. If space is at a premium it may also be 'bent' to fit in with no loss in performance. Best performance will be seen when mounted at least one quarter wave above the ground at the lowest frequency (approx. 17' or 5m). It may be mounted lower if necessary but due to the varying nature of the ground below, the overall impedance and performance may be affected slightly.

* This power rating is for intermittent amateur (CW or SSB) use and not for AM broadcast or constant carrier data modes. For AM broadcast a much higher power BALUN is required.

See the excellent review by Steve Nichols, G0KYA in the January 2012 edition of Radcom.

