

## Sales price £64.95

Sales price without tax £54.13 Tax amount £10.83

Choke - 1:1 Balun for use between 30MHz and 100MHz Maximum rating 2KW at 30MHz



A Ferrite Core Balun fitted with option of different connector types - B10-100-C DualBand Balun (10MHz to 100MHz) Yagis - 3KW Balun (2KW 50MHz. 1KW 100MHz)

## Description

The problem with winding a choke balun with coax is the bandwidth is very narrow. It is difficult to come anywhere close to the levels of coverage a ferrite sleever balun will do with the right materials. The innov Antennas, **B10,100-C** Ferrite Core Balun will cover JUME to 100MHz without any issues ensuring your antenna stays in tune on each band over a band over the fine ring character in use, unwanted and stray signals picked up on the outer sleeve of the coax will be filtered and prevented from entering the receiver chain.

Note: Only N-type connectors are recommended for frequencies above 70MHz as these are constant impednace connectors and therefore, antenna tuning is unlikely to be affected by insertion of this balun within a feed line.

Don't forget our rubber feed point sealant should you wish to completely water-seal your feed point! This can be found HERE

Specification:

Balun type: - Selectable connectors to suit any requirement, PL259, S0239 (UHF) or N-type

Diameter: 15mm

Length: 20cms

Connector: N-type

Operational range: 10MHz - 100MHz

Power Rating:- 3KW SSB - 2.5KW CW - 2KW - Datamodes, FT8, JT65 etc. @ 10MHz

## Why do I need a Balun on my Antenna?

The Ferrite Core baluns offered by InnovAntennas can help get the absolute best in terms of performance from any Yagi. It is not understood by many the importance of a balun and what is does so below are a few lines of explanation.

A balun is a **BAL**anced to **UN**balanced transformer. The Yagi antenna is a balanced radiator. Coax cable is an unbalanced feedline. When an unbalanced feedline feeds a balanced antenna with no balun in place, common-mode currents result and run back along the outside of the coax cable. This means the Yagi is forced out of balance causing a skew in the Yagis pattern and often a loss of Front to Back ratio (F/B) is seen in addition to coax radiation.

In additon to the performance drop, coax radiating can lead to causing intereference in your home and those of neighbours too. There is one more very important aspect of using a wideband balun such as the InnovAntennas ferrite core types and this can reduce reciever noise levels too in certain instances.

Many household products today produce noise and while it is normally at very low levels, sensitive ham radio receivers could be picked up and prevent weak signals being heard. Often, **these noises can be picked up on the coax cable itself which runs up towards and enters the antenna system**. The Ferrite cores within the InnovAntennas balun not only prevent common-mode currents runing back down the coax cable when transmitting, they prevent these stray noises picked up on the coax cable from entering the antenna system and inturn, your receiver.

For the very best in terms of performance, always install the right kind of balun. Select and InnovAntennas balun and you are done!



The above shows the current (represented by the pink line) distribution through the driven element of a correctly balanced Yagi with a balun at the feed point.



The above shows a Yagi fed with coax and no balun at the point at which the coax is connected. The current distribution is uneven through the driven element and the coax cable can be seen to be radiating too



Examples of the InnovAntennas ferrite core baluns - High Power versions shown.  $/\!/$