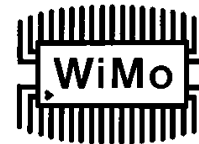




W3DZZ+5 Drahtantenne 10-80m, 1000 Watt
Best. Nr: 11376



Amateur Antenna W3DZZ+5 for short-wave bands 10, 15, 20, 40, 80 m



1. Antenna delivery package.

Antenna wire	4 pcs.
Trap	2 pcs.
Balun	1 pcs.
Brass wire	2 pcs.
PL-259 connector (better suited for soldering)	2 pcs.
Block	1 pcs.
Package	1 pcs.
Instruction manual	1 pcs.

2. Antenna specifications.

Operating frequencies (for SWR), less than 2	
10 m	28–29.5 MHz
15 m	21.0–21.32 MHz
20 m	14.0–14.35 MHz
40 m	7.0–7.2 MHz
80 m	3.5–3.8 MHz
Impedance	50 Ohm
Connector type	SO-239
Max. power input	1000 W (SSB, CW)
Antenna length	36 m
Antenna weight	2.35 kg
Polarization	horizontal

3. W3DZZ+5 antenna description.

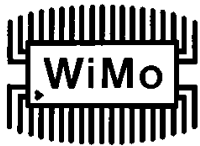
The attempts to introduce the three-band dipole **W3DZZ+3** into the European market led to an interesting acquaintance with a new design of an old antenna which additionally had 21 and 28 MHz. That design was suggested by a well-known Finnish radio amateur Jukka Heikinheimo OH2BR who further got to know about the modification from his friend OH2EC.

The new antenna is shown in the figure below. Its differences from the predecessor are as follows:

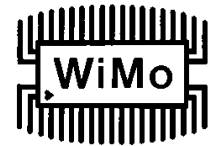
- The antenna is powered through a 1/4 wave transformer with the resistance of 75 Ohm, which improves matching at 14 MHz without considerable decreases in other bands;
- Two hanging whiskers at last made it possible to “start” the antenna in the band of 21 MHz with an excellent standing wave ratio;
 - The selection of LC elements in the antenna traps are optimized for a successful compromise of resonances 80 m and 20 m band.

WiMo Antennen und Elektronik GmbH

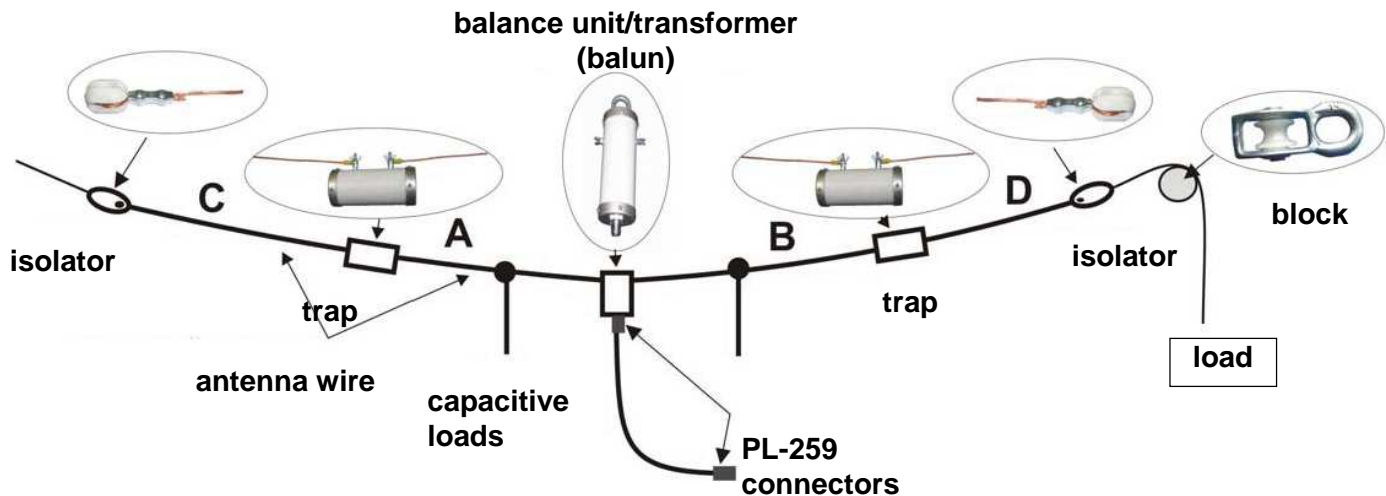
Am Gäxwald 14, D-76863 Herxheim Tel. (07276) 96680 FAX 9668-11
http://www.wimo.com e-mail: info@wimo.com



W3DZZ+5 Drahtantenne 10-80m, 1000 Watt
Best. Nr: 11376



4. Electrical circuit and antenna operation diagrams.



5. Design.

Trap design

Trap is made under traditional scheme. It is a parallel circuit which consists of inductance coil on the plastic mandrel with insulated wire and the cable capacitor with the breakdown voltage of 3 kV.

The circuit is placed in a fiberglass case to protect against rain. The case is not sealed, which allows the inside elements to breath and drain unwanted water. Nevertheless, it is properly protected against atmospheric condensation.

Antenna's wire arms are attached to the trap with fly nuts. Each trap passes through our Quality Control department to check basic parameters: rejection of frequency and reactive impedance at 3.65 MHz and 14.2 MHz etc.

Balun design

Balun is designed to reduce radiation caused by feeder skinned current. This design implements a current balun. In addition to balancing adjustment it enables transformation of the antenna impedance at 14 MHz band.

6. Antenna assembling.

The installation of the antenna is quite easy. Please note that longer wire segments are connected to the balun, and shorter wire segments are extend from the trap.

In the center of the antenna, two short segments are connected mechanically with the balun's eyebolt by stranding using brass wire. Make sure that while pulling the antenna, mechanical loading lay on the antenna curtain and this wire strand, but not on the bends heading to the balun's trailer.



7. Installation rules.

We suggest that while buying this antenna, you have already examined the installation location, place or area where you would like to install it.

Follow things should be kept in mind –

- The span between two points of suspension shall be at least 33 meters. The height of the suspension points: at least 10 meters from base/ground.
- The cable from the antenna's center must be perpendicular to the curtain for at least 10 meters. In case the perpendicular length cannot be achieved, not a problem, the Antenna would still work, however one may observe slight parameter change on 20 m band.
- Antenna can be installed or positioned either horizontally or at an angle to the horizon as a Slopper

WiMo Antennen und Elektronik GmbH

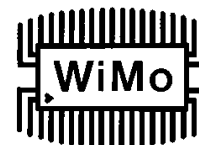
Am Gäxwald 14, D-76863 Herxheim Tel. (07276) 96680 FAX 9668-11

<http://www.wimo.com>

e-mail: info@wimo.com

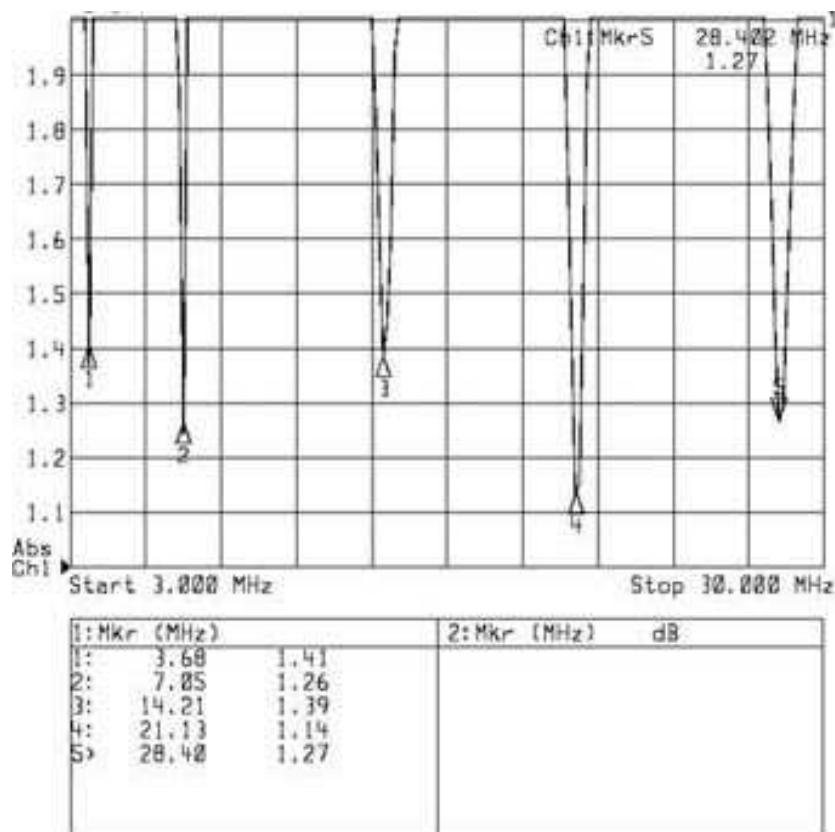


W3DZZ+5 Drahtantenne 10-80m, 1000 Watt
Best. Nr: 11376



- style; such positioning is beneficial for doing DX long distance QSO.
- It is not recommended to strengthen the curtain hard to avoid breaking the antenna during heavy winds or extreme changes in temperature i.e. ice coating. You can prevent this by applying our whirl block and select a suitable load to hang the antenna in a sliding position.
- Be aware, while lifting the Antenna, whenever possible have more than one person available to help in the installation, make sure to wear necessary safety gear and do not climb tower/trees during rainy /wet season or during heavy snow. Keep the Antenna away, at least double it's length from the electricity wires/poles. For frequent installation/un-installation, one may use pulley at either both ends or center of the antenna depending on the antenna orientation.
- Be sure to seal the connectors.

8. Antenna SWR diagrams.



9. Warranty.

9.1 The term of warranty is 1 (one) year from the date of purchase/receiving antenna by our customer. During the warranty period, any manufacture related failures that have occurred during this period, would be taken care by the manufacturer at his expense.

9.2 The manufacturer is not liable for the failure of antenna and does not guarantee its work in the following cases:

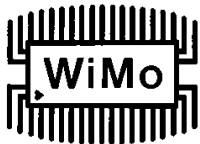
- Non-compliance of the installation and operation;
- Negligence during transportation;
- Configuring, testing and repair by persons without proper authorization;
- Breaking of the manufacturer's sealing marks;
- Damages or malfunction are caused by fire, lightning or other natural event.

WiMo Antennen und Elektronik GmbH

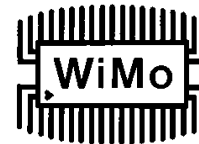
Am Gäxwald 14, D-76863 Herxheim Tel. (07276) 96680 FAX 9668-11

<http://www.wimo.com>

e-mail: info@wimo.com



W3DZZ+5 Drahtantenne 10-80m, 1000 Watt
Best. Nr: 11376



11. Claims information.

11.1. In case of failure of parts, components, or the whole equipment during the warranty period, the manufacturer replaces them only on the basis of claim report, prepared in the presence of the manufacturer's representative. A unilateral act is effective only if the manufacturer reported refusal to send a representative.

11.2. At the request of the manufacturer the defective parts or equipment should be sent to the manufacturer. Shipping charges of the defective equipment from the buyer to the manufacturer shall be paid by the buyer. Shipping charges of the fixed equipment from the manufacturer to the buyer shall be paid by the manufacturer.

12. This product is not a subject for compulsory certification.

WiMo Antennen und Elektronik GmbH

Am Gäxwald 14, D-76863 Herxheim Tel. (07276) 96680 FAX 9668-11

<http://www.wimo.com>

e-mail: info@wimo.com