



HF/VHF Telescopic MultiWide Band Antenna HF-PRO-2-PLUS-T

Specifications

Frequency range	3.5 MHz (coil) /7~30 + 40 + 50 MHz + 70 +145 MHz (VHF)
Max. Power Rating	130W (SSB)
Impedance	50 Ω
Antenna Length	29cm (disassembled) / 262.5cm -270.5cm 11.42 inches / 103.35 - 106.50 inches
Weight	425g
Connector	PL-259
Antenna type	Loaded 1/4λ vertical (HF band) 1/4λ (40 & 50MHz) & 5/8λ (70 & 145 MHz VHF)
Antenna parts	Adjustable coil for 7 for 7~30 MHz, add-in coil for 3.5 / 4.00 MHz (80m) band. stainless steel 12 sections telescopic rod: - Length collapsed: 24cm / 9.45inch - Length extended: 218cm / 85.83inch
Coil form composition	Fibre Reinforced Polymer (FRP)

Notes for Using the Antenna

To use your **HF-PRO-2-PLUS-T** from Komunica® antenna correctly, please read these instructions thoroughly before use and keep this document on-hand for later reference.

The **HF-PRO-2-PLUS-T** from Komunica® is intended for use by Radio Amateurs only within their authorized frequency bands. For use on some amateur bands an antenna tuning unit may be required.

Please note:

1. Thanks to its small size and light weight, this antenna can be used for portable SOTA and Park activations, etc. while still providing the best performance.
2. The **HF-PRO-2-PLUS-T** has been designed for use as stationary antenna and is not designed for use on a moving vehicle.
3. To get the best performance from the **HF-PRO-2-PLUS-T** use of an Antenna Coupler (ATU) is recommended but not mandatory.
4. The **HF-PRO-2-PLUS-T** should not be installed as a permanent home station antenna as it is not designed to withstand storm force rain and winds.
5. Do not touch the antenna during transmission as this may cause electric shock or an RF burn.
6. When mounting or detaching the antenna from a base, take care so as not to cause personal injury with the whip.

Description

1. The **HF-PRO-2-PLUS-T** is designed to operate on the HF amateur bands between 3,5 and 7-30MHz plus 50MHz.
2. The antenna is tuned to the required operational frequency by adjusting the coil up and down adjustment.
3. **To operate on the 3.5 MHz band**, installation of the additional coil (N.2) is required between the body of the antenna (N.3) and telescopic whip (N.1) fully extended.
4. **To operate on 50MHz**, simply reduce the telescopic whip element length on top of the retracted N1 body to a length of 131 cm.
5. **To operate on VHF 145 MHz**, both the movable coil (N3) and the telescopic rod (N1) are reduced to their minimum length (24cm). The SWR within this band can be as low as 1.5:1.
6. Thanks to the fiber reinforced polymer (FRP) material with which Komunica® has manufactured the **HF-PRO-2-PLUS-T**, the antenna is both lightweight & flexible while also being small when packed so making it easy to carry.

Adjustment

- When using on a static vehicle: Connect your Komunica® **HF-PRO-2-PLUS-T** to a stable magnetic base of a suitable diameter (recommended Model: Komunica® TRIPLE-MAG) or use a solid PL-259 mount, connected securely. Pre-assemble the antenna and adjust its length with reference to the coil settings graph (1.1).
- To be able to adjust to the required length loosen the locking nut by hand.
- To select the required frequency band, set the position of the antenna body N3 over the scale N4 to coincide with the value shown in the chart (1.1).
- Lightly tighten the locking ring by hand. Never use tools such as pliers, as these could damage your Komunica® **HF-PRO-2-PLUS-T**.
- For fine tuning on HF, always perform your TX tests with the lowest RF power possible. Move the coil up or down until you have fine-tuned to the desired frequency which is indicated by lowest SWR.
- Once the tuning is correct, you can already increase the power, up to respecting the maximum power of 130W-SSB. Should SWR level be higher than 2:1 in use on HF please check your ground plane or change the location of your antenna on the car. Use an Antenna Tuner for maximum flexibility.

Note

Should the SWR level be higher than 1.5:1 in use on HF, please check your ground plane or change the location of your antenna on the car. Use an Antenna Tuner for maximum flexibility.

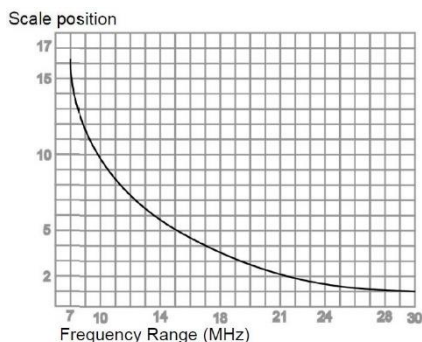
Recommendation

All antennas can have their effectiveness reduced due to the bad radio propagation conditions.

The **HF-PRO-2-PLUS-T** has been manufactured under strict quality controls, if damage is caused during shipping, please contact your dealer promptly.

Design and specifications of this antenna can be changed at any time without previous notice.

Coil positioning chart (1.1)

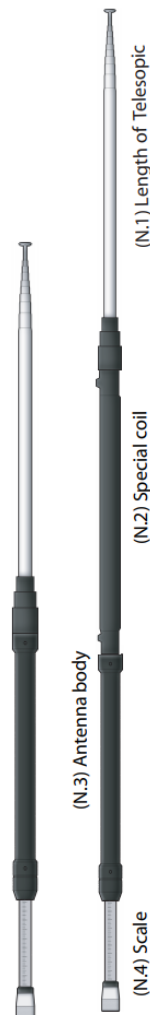


This chart is indicative and refers to a standard adjustment scale that may change depending on each site and installation method. It offers only indicative measurements.

To make the fine tuning try playing with the length of your scale and the telescopic rod sections. To operate at **50MHz**, always have element N3 retracted, and the telescopic rod (N1) adjusted to a length of 131cm (about -4 of the upper sections of the telescopic section extended).

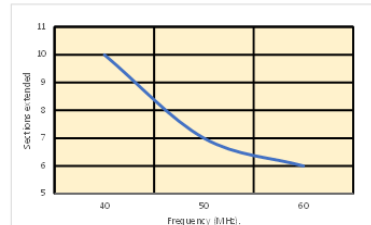
Installation

- When using PL-259 antenna mount boot-edge bracket, roof rack bracket, etc.). Install it where there is a good connection to the car chassis. If you are not going to install on a vehicle, remember to use an appropriate counter poise or radials connected to the antenna.
- To install your Komunica® **HF-PRO-2-PLUS-T** on the vehicle roof using a magnetic base, your vehicle roof will act as an excellent ground plane. Position the magnetic mount as close to the center of the available metal as possible. Should your car have limited amount of metal in its roof. You can use our Komunica® HF-MAG accessory as a ground plane.
- If you wish to operate your **HF-PRO-2-PLUS-T** on a non-metal surface, remember to use at least 10m of wire as a counterpoise to the antenna.
- Ideal portable operation is possible using the Komunica® telescopic tripod (**TRIPOD-KIT**). It is very light, compact, and easy and quick to assemble anywhere. It includes 8 Radial wires that may be simply laid across the ground and their ends pegged down.
- Installation on a balcony metal railing is also possible as the railing will act as a ground plane. It is recommended to use an "L" shaped bracket for such an installation. The following HF-settings chart is indicative and refers to a standard adjustment scale that may change depending on each side and installation method. It offers indicative measurements only.



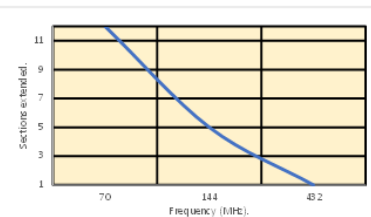
1/4 wave length antenna:

	Frequency (MHz)	Sections extended
8m*	40	10
6m	50	7
*8m only for Latvia, Slovenia and Ireland All values approximate and depend upon the antenna's surroundings		



5/8th wave length antenna:

	Frequency (MHz)	Sections extended
4m*	70	12
2m	144	5
*4 meters not available in all countries. All values approximate and depend upon the antenna's surroundings		



VHF: To operate element N3 must be retracted & the telescopic rod N1 adjusted to the required length to form either a $1/4\lambda$ or $5/8\lambda$ antenna. An SWR in the range of 2-2.5:1 should be expected.

Don't forget to count the base section of the telescopic whip!

Accessories

TRIPOD-KIT

Telescopic Tripod
Extendable 5 sec.



HF-MAG

7 ~ 50MHz Magnetic
Ground Plane
Attachment



TRIPLE-MAG

Magnetic base
with triple magnet
maximum adherence
3pcs x 9cm
Connector: SO-239
Cable RG-58 (5mts)



Errors and omissions excepted (E & OE)

