

GSM-DCS-3G JAMMER

INH30W



CUSTOM SERIES

The INHV30W series is composed of inhibitors mobile telephony customs up to 4 bands, GSM, DCS, 3G and optically PHS, with an average output of RF power by channel of 30W maximum.

Advanced and robust electronic that generates the radiofrequency. Activation control and power by channel, thermal protection, temperature measurement and protection against short circuits, protection of wire breakage at the antennas and open circuits. Robust system reducing breakdowns to a minimum.

According to the model a control panel with keypad, governs the operations of the inhibitor, showing information on the local LCD display.

An ethernet interface makes it possible remote network control, of the operations and monitoring the alarms and parameters.

Optionally can be used an interface with remote control or bidirectional radio modem in the authorized ISM band.

The nucleus of the inhibitor usually located in an aluminum block, accompanied by several ventilators to facilitate the dissipation of the heat generated.

There are several models of equipment according to customer needs:

- Portable for vehicles. Aluminum box, power supply 24Vc. It is usual to control via radio modem.
- Fixed Rack. 110-220Vca and are usually placed in 19" rack according to specifications.
- Suitcases military. Models camouflaged. Control is performed with a remote control of portable RF.
- Military Suitcases, robust and watertight.
- Soft-Rack. Portable Rack.

The supplied antennas can be omnidirectional of 5dBi or more gain according to specifications or directional patch 9 to 14dBi or more, according to the requirements.

The RF Connection is done through type connectors "N" with cable up to 2m.

TECHNICAL FEATURES INHV30W

| BAND | FREQUENCY | POWER MEDIUM MAXIMUM | POWER BY CHANNELS |
|-----------------------|--------------|----------------------|-------------------|
| GSM | 925-960Mhz | 43.5dBm | 16dBm/30Khz (min) |
| DCS | 1805-1880Mhz | 43.5dBm | 16dBm/30Khz (min) |
| 3G | 2110-2170Mhz | 43.0dBm | 10dBm/30Khz (min) |
| PHS (optional) | 1910-1990Mhz | 43.5dBm | 16dBm/30Khz (min) |

- **Power Supply:** 110-220Vca fixed equipment.
- **Power Supply:** DC24-27V portable equipment.
- **Energy Consumption:** 350W approximately.
- **RF Power:** 30W by channels aprox. Adjustable.
- **Antennas:** 3. Multiband Panel. 9-14dBi. Cable 2m max.
- **Ventilation:** Yes. Forced. Ventilators controlled by temperature.
- **RF Connector:** Type N.
- **RF Output Protection:** Yes. Shortcircuits, Broken antenna, open circuit.
- **Control Panel:** Yes. Graphic LCD Display 128x64 Blue/White. Backlit.
- **Interface:** Ethernet. TCP/IP.
- **Optional Interface:** Radio modem 869Mhz.
- **Remote Control:** Yes. (TCP/IP or radio)
 - Power Level by band
 - Activation or individual stop by band
 - Temperature
 - Ventilation
 - Alarms
 - State
- **Control Software:** Included for fixed equipment. Windows 7 or higher.
- **Container:** Suitcase, aluminum block or Rack 19". According to specifications.
- **Termination:** Custom.



ABOUT INHIBITION OF MOBILE PHONES

Wireless communication in the mobile phone is effective when is guaranteed sufficient signal density of the carrier for a certain density of noise during communication.

A Carrier with a smoothie in the appropriate band frequency and the distorted signal is used to increase the noise radio frequency and interrupt the communication between the base station an the mobile phone.

The radius of protection of the inhibitor in the free space depends on the level of the signal received in the mobile phone from the base station, the situation of the mobile phone, the proximity of the base station, the inhibitor potency and gain and situation of antennas.

The following formula and comparison table of distances, also the antenna gain, give an idea of the effectiveness of an installation of inhibitor.

$$P_{ch} + G_{at} - L + FAF \geq P_{rx}$$

Parameters:

- Pch:** Minimum power of the inhibitor of the carrier
- Gat:** Antenna Gain
- L:** Attenuation with distance
- FAF:** Modification of the figure with the distance, election of 6dB for 1.8G.
- Prx:** Maximum power carrier of telephony base station

Table distances:

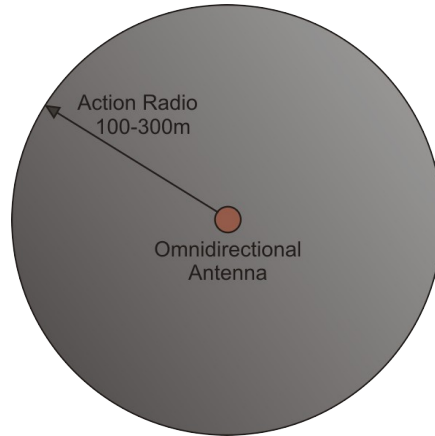
| distance | 900MHz atenuation | 1800MHz atenuation | distance | 900MHz atenuation | 1800MHz atenuation |
|----------|----------------------|-----------------------|----------|----------------------|-----------------------|
| 1 m | 38 dB | 44 dB | 25 m | 70 dB | 76 dB |
| 2 m | 44 dB | 50 dB | 30 m | 72 dB | 78 dB |
| 3 m | 50 dB | 56 dB | 35 m | 74 dB | 80 dB |
| 4 m | 54 dB | 60 dB | 40 m | 75 dB | 81 dB |
| 5 m | 56 dB | 62 dB | 45 m | 76 dB | 82 dB |
| 6 m | 58 dB | 64 dB | 50 m | 77 dB | 83 dB |
| 7 m | 60 dB | 66 dB | 60 m | 78 dB | 84 dB |
| 8 m | 61 dB | 67 dB | 70 m | 80 dB | 86 dB |
| 9 m | 62 dB | 68 dB | 80 m | 81 dB | 87 dB |
| 10 m | 63 dB | 69 dB | 90 m | 82 dB | 88 dB |
| 15 m | 64 dB | 70 dB | 100 m | 82 dB | 89 dB |
| 20 m | 68 dB | 74 dB | 200 m | 84 dB | 90 dB |

LOCATION ANTENNAS

Normally we use two types of antennas:

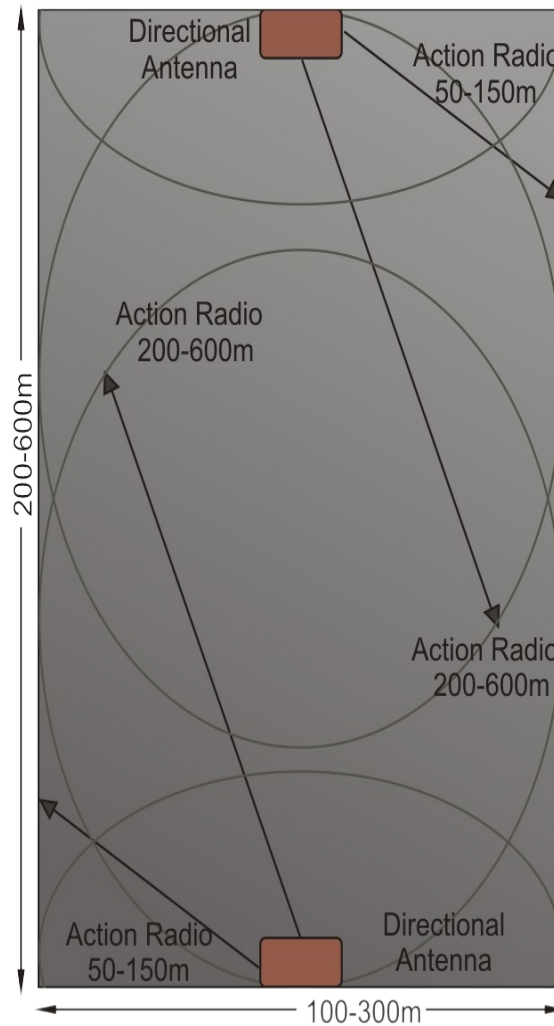
1.- Omni-directional.

The transmission antennas should be placed in the center of the protection zone.



2.- Directionals. Patch.

Transmmission antennas should be placed at the edges of the enclosure of the area protection.



INHV30W RACKS 19"

Some examples of racks 19" for the wall:

