

# High Power Cellular Jammer



## C-Guard High Power Cellular FireWall/Jammer

The C-Guard high power unit provides a unique solution for coverage of large areas by using a dual transmitter generating up to 30W of jamming power over the desired cellular frequency bands.

The high power unit incorporates a metal shielded cage comprising two jamming signal generators, each connected into a 15W booster power amplifier, thereby enabling the transmission of up to 15W per frequency band. The cage is attached to a metal heat sink for heat dissipation under continuous operating conditions.

Standard units are housed within a robust Pelican case and powered by mains AC voltage (110/220). The filtered output signal is fed into directional antennas installed within the Pelican case, opposite the heat sink side. Each unit has VSWR protection that disables transmission in the event that no antenna is connected to the RF output connector or in the event that antenna transmission is obstructed by a close object.

Optional configuration may include external N-type RF connectors for the use of external antenna(s) instead of the unit's internal antennas. The output signals of different frequency bands may also be combined using a diplexer so as to enable the use of a single wideband antenna (e.g., 800/900) or a dual-band antenna (e.g., 900/1800). Further optional configuration may include DC input operating voltage (12/24V) to allow vehicle operation. Another available option is an internal battery powered unit, allowing portable operation of approximately up to 1 hour without any power source at full transmission power. Battery operated units may be recharged by either mains (110/220V) power or DC (12/24V) power, provided that the unit is in recharge mode and not transmitting. An optional external trickle/fast charger enable battery recharge, while the unit is operating.

Designed for versatile use, the high power unit may be either deployed as a fixed installation (wall or rack mounted), vehicle mounted (by using vehicle's DC power feed and external magnetic base antenna) or portable use (by using a battery operated unit).

Each unit's jamming signal generators covers a different cellular band (e.g., 800/900/1800/1900) and is configured for optimum coverage of the specific standard(s) available in the respective band (e.g., GSM/CDMA/TDMA). Additional frequency bands and/or cellular standard are available upon request. As third generation cellular technology (3G) is deployed, additional frequency bands will be offered. The jamming signal generators are built using PLL synthesized technology to ensure high accuracy and stability during operation. This ensures that the unit's transmitted jamming signal blocks all cellular signals without interfering with other vital wireless communications.

An optional infra-red remote control enables digital power control of each jamming signal generator up to the maximum output power, as well as other transmission parameters such as center frequency, span and modulation characteristics. In order to disable the operation of mobile phones, the jamming signal, when received at the mobile phone's antenna, should have sufficient strength in comparison with the radio signals transmitted by the cellular network's base stations. Since the high power unit's maximum output power is fixed, the actual jamming range in any given location is a function of the signal strength of each cellular network as received by mobile phones in that location. The signal strength is mainly a function of the distance from nearby cellular base stations. Therefore, in principle, the closer the base station, the lower the jamming range and vice versa.



## Cellular FireWall C-Guard High Power

### APPLICATIONS

C-Guard high power has been specifically designed for the following applications:

- Coverage of prison facilities
- Military bases
- Antiterrorist squads
- Drug enforcement units
- Bomb squads
- Remotely cutting off communications in buildings
- Coverage of open spaces
- Embassies
- Government facilities
- Sensitive locations



Internal directional antennas

## Technical Specifications

### SYSTEM OVERVIEW

RF Power output	30W max (15W per band)
Signal source	PLL synthesized
Input power	110/220 Vac or 24 Vdc regulated
Modules per unit	single/dual band
Antenna	Internal directional antenna(s), 7 dBi gain N-type connectors for external antennas External antennas not included

### CELLULAR SYSTEMS

Frequency bands **	463 ~ 468 MHz * 851/869 ~ 894 MHz 925/935 ~ 960 MHz 1805 ~ 1880 MHz 1930 ~ 1990 MHz
Air interface standards	Analog: AMPS, N-AMPS, NMT, TACS Digital: GSM, CDMA, TDMA (D-AMPS), iDEN

### PHYSICAL DIMENSIONS

Size	320mm (H) x 420mm (L) x 160mm (W)
Weight	14 kg (dual band) for standard configuration

### ENVIRONMENTAL

Operating temperature	0°C to 45°C
Humidity	5% to 80%
Case	Weather proof

### OPTIONAL CONFIGURATION

Diplexer	Single diplexed antenna output
Leaky coax	Radiating cable antenna
Internal battery	2 x 3AH
Battery charger	Trickle/fast charge
DC input power	12/24 Vdc non-regulated input
Remote control	Infrared

\* FUTURE

\*\* MAXIMUM TWO BANDS PER UNIT



Portable operation



Vehicle mounted HP unit



Vehicle mount magnetic base antenna

## Cellular Jammer working Principle:

The jamming system utilize a unique transmission method that confuses the decoding circuits of cellular handsets as if no cellular base station is within the service area. Upon activating the jammer, all idle phones will indicate "NO SERVICE". Consequently, all cellular phone calls already in progress within the defined area will be cut-off and the radio link will be lost. When activated, incoming calls are handled as if the cellular handset is OFF and calls may be routed into a voice mailbox. When the jammer is turned off, all cellular handsets will automatically re-establish communications with the cellular systems and provide full service.

For further info and price quote, please contact:

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