

Crownhill Associates

smart electronic solutions

Detect and Report localized Jamming

E-GSM-900 / DCS-1800 / PCS-1900



Jammer! Will detect and optionally report the presence of localised active jamming of the GSM/GPRS/PCS mobile communications networks.

Jammer! Provides visual indication of network availability and visual or optional audible warning of active jamming.

Small and discrete, operation is simple via on/off buttons, Status is indicated via LED :-

Status LED	<i>Jammer!</i> Status
OFF	<i>Device Off</i>
Green Fast Blink	<i>Searching for Network Not registered</i>
Green Slow Blink	<i>Registered On Network</i>
RED Fast Blinking	<i>Network Jamming In action</i>

Optional

- Vibrator or Buzzer can indicate active jamming.
- Relay contacts to trigger external alarm.

Jammer! can report active jamming via an internal vibrator or trigger an external device via its relay contacts.

Jammer! can (subject to network support) attempt to report active jamming by silently sending an SMS message to a predetermined address.

Jammer! can be 'tuned' to its local environment to prevent spurious triggering in environments that are electrically noisy -

Jammer! set with appropriate values during manufacture - there should be no need to 'tune' to **Jammer!** during normal use.

General Specifications

Operating Temperature

- Temperature in normal functional conditions $0^{\circ}\text{C} \div +55^{\circ}\text{C}$
- Temperature in extreme functional conditions $-10^{\circ}\text{C} \div +60^{\circ}\text{C}$
- Temperature in storage conditions $-30^{\circ}\text{C} \div +85^{\circ}\text{C}$

*these temperature can affect the sensitivity and performance of the module

Operating Frequency

Mode	Freq TX (MHz)	Freq RX (MHz)	Channels (ARFC)	TX - RX offset
E-GSM-900	890.0 - 914.8	935.0 - 959.8	0 - 124	45 MHz
	880.2 - 889.8	925.2 - 934.8	975 - 1023	
DCS-1800	1710.2 - 1784.8	1805.2 - 1879.8	512 - 885	95 MHz
PCS-1900	1850.2 - 1909.8	1930.2 - 1989.8	512 - 810	80 MHz

Tx Power

GSM-900

The transceiver module in GSM-900 operating mode are of **class 4** in accordance with the specification which determine the nominal 2W peak RF power (+33dBm) on 50 Ohm.

DCS-1800

The transceiver module in DCS-1800 operating mode are of **class 1** in accordance with the specifications which determine the nominal 1W peak RF power (+30dBm) on 50 Ohm.

PCS-1900

The transceiver module in PCS-1900 operating mode are of **class 1** in accordance with the specifications which determine the nominal 1W peak RF power (+30dBm) on 50 Ohm.

Rx Sensitivity

The sensitivity of the transceiver module according to the specifications is better than **-102dBm** in all the operational conditions.