



*Technical Description  
Manpack or Portable Jammer SL250G6P3S4H*

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## 1 Main features

The manpack or portable jammer is a lightweight and easy to carry jammer. The jamming technology is reactive, active or hybrid. The output power (max. 250W) is exceptional high for portable jammers in the market.

The basic configuration has an max. output power of 250W (HF/VHF/UHF 100W, 2G,3G,4G,5G,WIFI,Bluethooth 100W, 3GHz-6GHz 50W).

The following bands can be set flexible over the GUI:

- 2 x 300MHz bandwidth in the range of 20MHz – 530MHz
- 4 x 300MHz bandwidth in the range of 600MHz – 2700MHz
- 2 x 300MHz bandwidth in the range of 2700MHz – 6000MHz

The system has a total output power of 250W and could cover 20 to 6000MHz. The system can optional be used with external antennas with polarisation diversity in receiving and in transmitting mode. This will give an additional gain of 6 – 20dB (4 – 100 times better than without polarisation diversity).

The system has additional spectrum analyzer functionality.

The system can be installed quickly on a backpack, car or on a position in the field. If needed, from this position the operator can setup a 200m – 500m fibre optic to operate the system from another position, if necessary (far from the jammer) to be save from potential treaths.



## 1.1 Jamming Algorithms of the Jammer

1. Continuous jamming – jammer generates signal in user programable ranges. Input RF signal has no influence on output. This mode includes algorithms as:
  - Barrage permanent – device is generating noise signal on defined frequencies with defined power,
  - Custom permanent – device uses previously saved signal, bandwidth and numbers of carriers can be adjusted and uploaded from a preloaded file
  - Waveforms can be generated accordingly customer needs
2. Reactive jamming – jammer reacts on RF input signal by generating/replaying signal on output with predefined power. This mode includes algorithms as:
  - Reactive – generating output signal when input power is above a defined threshold
  - Reactive – generating an output signal according to input signal
  - Reactive – generating an output signal according to input signal, if there is no signal detected in the programmed band, the signal generator create in the whole band a white noise with maximum power

Both active and reactive jamming can be combined in the same band (hybrid)

## 1.2 TX Power of the Jammer

The system covers HF/VHF/UHF, 2G,3G,4G,5G,WIFI,Bluetooth and 3GHz-6GHz. The power distribution is as follow:

- |                                   |      |
|-----------------------------------|------|
| • HF/VHF/UHF                      | 100W |
| • 2G, 3G, 4G, 5G, WIFI, Bluetooth | 100W |
| • 3000MHz-6000MHz                 | 50W  |

## 2 Antennas

The antennas are optimized for the dedicated ranges. In the original configuration are 3 antennas included. The antenna 1 is omnidirectional 25 -512 MHz and has a length of 1510 mm. The antenna 2 is omnidirectional 790 – 2700MHz has a gain of 4dBi and a length of 535mm. The antenna 3 is omnidirectional and has a length of 180mm.



### 3 Housing

The Jammer housing has the following dimensions (including lids):

Dimension	Outside (without lids)	
Height:	580mm	
Width:	320mm	
Depth:	146mm	
Weight	23 kg without antennas and batteries	
Standards	MIL-STD-810	
Colour	Green (RAL6031-f9)	



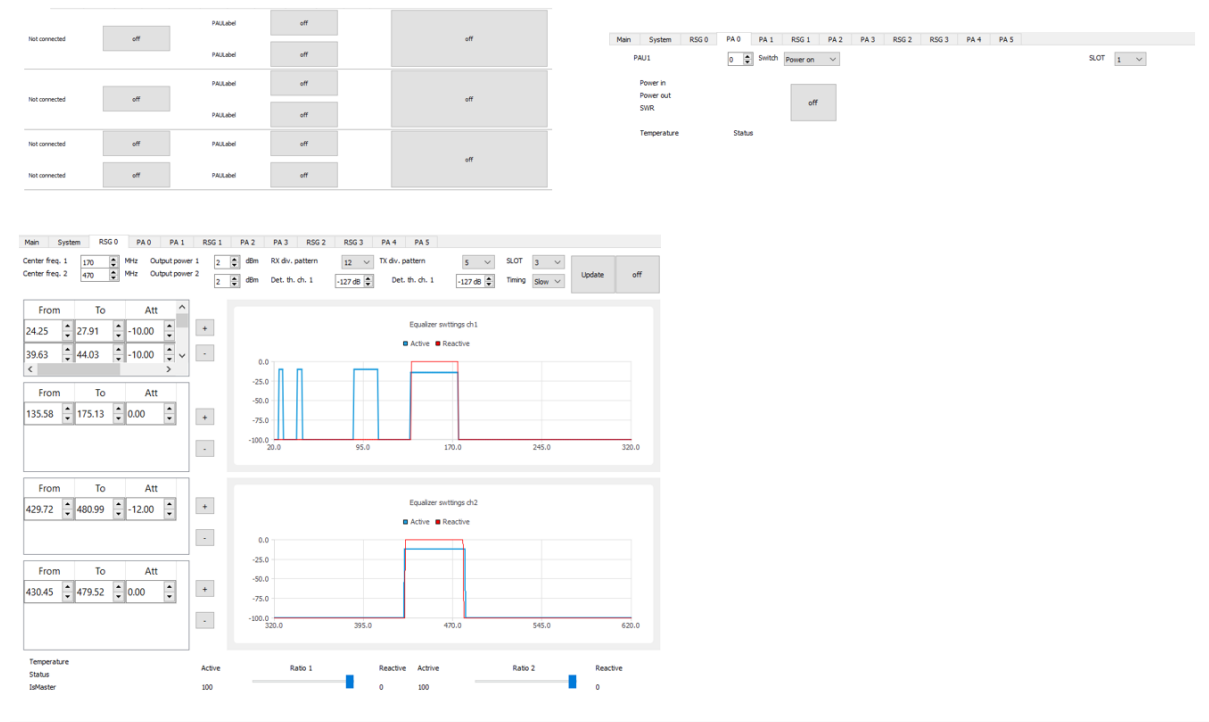
## 4 GUI (graphical interface)

The portable or manpack jammer can be programmed by any computer over Ethernet cable and a dedicated GUI Software.

In the GUI the operator can program the frequencies, the power and the jamming application as barrage, discrete signals and reactive. The operator can program notch frequencies (gaps) which should not be jammed. The GUI can be designed / customized on special request as per user needs. However, a standard GUI is provided.

The Jammer offers a variety of indications and alarms. All units are permanently monitored. In case a warning or failure occurs, the operator will be informed through audible tone and on the screen.

Picture as an example:



## 5 Operational Power Source

The system uses 9V – 36V, backed by two 24V, 10.4A/h lithium phosphor batteries, this guarantees an independent power on full load for about 1h. The system is directly connected to the batteries and the batteries can be changed while operation (hot swapable).

## 6 Remote Login (only if User allows)

It is possible to remotely access the Jammer via modem and landline connection to the internet. The system supplier can support upon request of the maintenance personnel.