COMLAB
radio frequency technology

Key advantages at a glance

– Reactive Jamming Technology
– Smart Signal Power Allocation
– No impact on other used wireless networks
– No signal disruption outside defined areas
– Modular Design (Frequency Band)
– Designed for highest jamming efficiency
– Easy to handle
– 10 year part availability

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Edition A

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Modular Jamming System (MJS)

The Modular Jamming System based on Reactive Jamming Technology is used to prevent from illegal or undesired wireless communication in specified areas.

The solution for efficient radio disruption

COMLAB leads the market in radio frequency technology applied for more than thirty-five years. Our involvement includes design, development, production and integration of turnkey high-frequency radio systems. Our considerable expertise and many years of experience mean that we are able to support our customers in discovering solutions for all needs.

Users

– Ministry of Interior
– Airforces
– Defence
– Governmental Agencies
– Armed Forces
– National Security Agencies
– VIPs
– Private and Others

Application

– Prison
– VIP Areas
– Churches and Mosque
– Governmental rooms
– Defined secure public areas
– others on request

Advantages

– Highest efficiency achieved with Reactive Jamming Technology
– Smart Signal Power Allocation
– No impact on other used wireless networks (DECT, PMR, TETRA, TETRAPOL…)
– No signal disruption outside defined areas
– Easy to install
– designed for highest jamming efficiency

USAGE

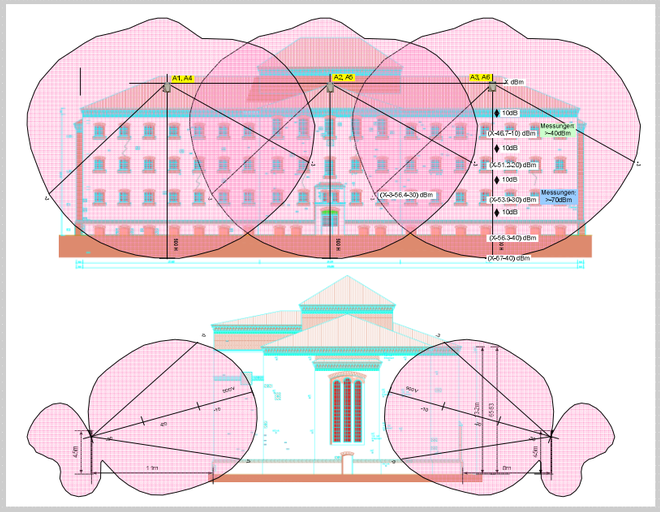
COMLAB presents the state-of-the art Modular Jamming System (MJS) to prevent from illegal or undesired wireless communication within defined areas. The system is widely used in Prisons, Governmental Rooms or areas where wireless communication is prohibited or lead to terrorism acts.

The Reactive Jamming Technology guarantees highest efficiency for real-time signal detection and disruption. The smart allocated power efficiency allows jamming in an accurate area without disrupting cellular coverage outside.

In order to use other communication system like DECT, TETRA, TETRAPOL, dPMR, DMR… signal generator modules with high band selectivity are used.

FUNCTION

High gain roof top or wall mounted antennas are used for real time reactive signal detection and generation. Additional antennas enhance cellular carrier detection and cellular phone localization. The supervisor can control the system by a Configuration and Operation Software at any place. The modular system structure ensures easy band extension.



SYSTEM PARTS

MJS-MU
Master Unit 694..2690MHz, 300Watt, 90..264VDC
– 19“ Rack, 20HU integrated in cabinet 600x600x1115mm

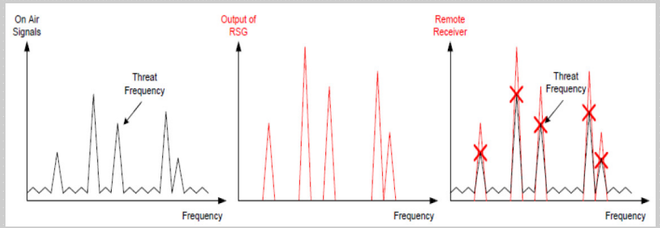
MJS-RU
Remote Unit 694...2690MHz, 900Watt, 90..264VAC
– 19“ Rack, 16HU integrated in cabinet 600x600x1115mm

MJS-ANT
Antenna Kit for reactive signal detection and disruption.
– Multiband Antenna Set high ERP

MJS-COS
Configuration and Operation Software for remote control
– Web based Software

MJS-LOCALIZATION (Option)
Cellular Phone localization
– Cellular Phone detection Units

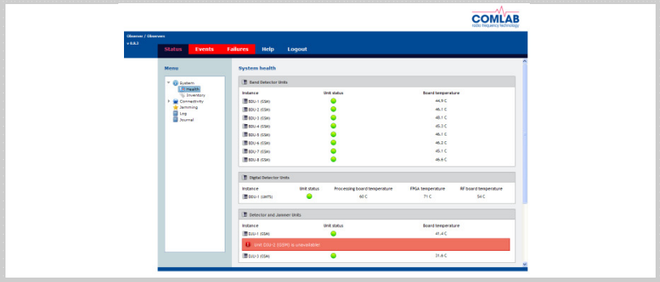
MJS-COMSYS (Option)
Communication System
– Walky-talky Kit with customized Frequency



SERVICES

System integration
MJS on site integration, measurement and approval
–engineering, transport, mounting, radiation measurement

After Sales Support (Option)
1st and 2nd Level Support on site on request.
– Training Administrator, Observer
– On site support
– maintenance, software updates



USER GUI

MJS-COS
Configuration and Operation Software on PC, Tablet PC or PDA
– Power ON/OFF
– Programming ASG, RSG
– Output Power PA
– Data logging
– Remote control by landline connection (Option)

Specifications

Key Advantages

– Reactive Jamming Technology
– Efficient Power Allocation
– Time slot jamming
– No neighbor band disruption
– Modular Design (Frequency Band)
– Easy to handle

Life cycle
– 10 year part availability

Frequency Bands Jammed	Bravo 850 / THURAYA GSM/UMTS900 GSM/LTE1800 UMTS2100 LTE700/800/2600 WIFI
Signal Power	up to 3000Watt ERP
Technology	Reactive
Power Supply	90..264VAC
Units	Programmable
RF Power	up to 500Watt
Weight	MU 50kg RU 80kg
Environment	-10..60°C, 95% HU
Cooling	active FAN