"The Best That Suits Your Needs"

CYBORG

NETWORK COMMUNICATIONS

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ABOUT US

We **M/s Cyborg Network Communications** are one of the leading System Integration Company providing Modern Technologies in Defence Govt, and Other Utilities Companies. Company , having specialization in System integration , manufacturing and Turnkey Solutions. We are well known company for System Designing, Implementation, Operation and maintenance of Telecom and IT Network from last **17 years**. CNC has Strategic alliances with major global manufactures/vendors like (Drone, Antidrone, Jammer & Sensors) etc Dell, Aer, Sony, Cisco, D-Link, Uniline, Microtek, LG, Samsung, Sparsh, Keysight, and many more for latest technologies.

CNC is an engineering solutions company with **17 years** of experience in Telecom and Information Technology (IT) Domain. Our capabilities are built on our core philosophy that smart people, smart processes, and smart technologies provides the strong foundation for a best-in-class experience with our clients.

As an organization that's focused on addressing customer's business needs, we go much beyond IT issues and proactively contribute to smooth business operation, growth, productivity and thus, profitability of the organization. No wonder, over the years, we have built lasting business relationships with our customers and we pride ourselves in offering the highest level of service in the industry.

We proud of our extraordinary customer list which includes the Indian Army, Indian Air Force, Border Security Force (BSF), BSNL, NHM,JKSFC,JKPDD, Punjab National bank, State bank of India, J&K Police NHPC etc

We have a proven track record of past performance defined by a wonderful record of projects completed on time and within the budget; often exceeding client and customer expectations. The Company has successfully completed more than **850 projects** with Indian Army & Governments

CNC believes that the progress must be achieved in harmony with the environment. A commitment to community welfare and environmental protection are an integral part of the Corporate Vision.

We are pleased to inform that we are specialized for execution of following items related projects:

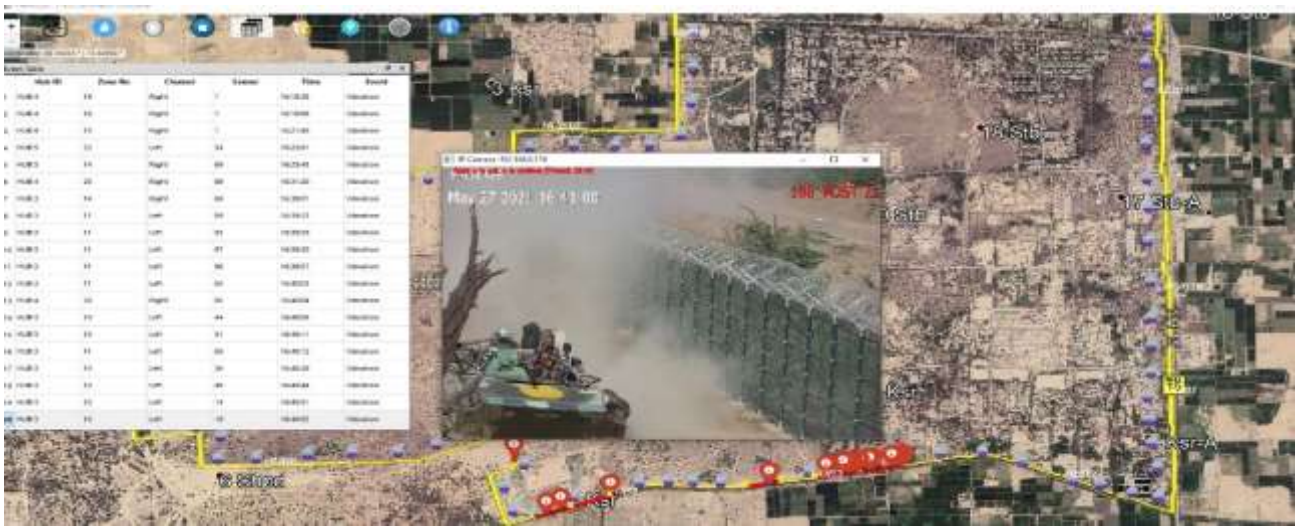
Antidoron solutions	Access Network Solutions
RF Jamming solutions	IVRS & IEMS Solutions
Bullet proofing of armed vehicles	Voice Logger and Recordings
OFC Room, audio & video solution with latest technologies	Transmission Network Solution
MAN Pack & Portable anti RCIED jammer	Wireless Network Solution (WiMax/Wifi)
Vehicular Mounted Wide RF Band High Power Jammer	Communications System
Anti-Drone/Quadcopter/UAV/UAS Jamming system	Microwave communications Systems
Reactive Manpack RF Jammer	Security System
Bio-Metric Systems	Test and Measurement Equipment's
NMS Solutions	IP-PBX & VOIP Solutions
Web/Video Conferencing	Sales of Computer, Server and its peripherals.
Surveillance System (IP , Analog Cameras and Recorders.	Networking Solutions
Structure Cabling Solution	Sensors early warning system .
Network Synchronization Solution	Integrated communication system
Cyber security solutions	Special Operational command post

PSSAD Sub Systems

- RF based Detection Module.
- Passive RF Surveillance Receiver based on Software Defined Radio (SDR) (70MHz to 6GHZ)
- Detects the presence of Drone operating in ISM Bands
- Operates in Auto Jamming / manual Jamming Modes.
- In Auto Jamming Mode detector module triggers Jammer first then sends alert to Command & Control
- In Manual Jamming Mode detector Module sends alert to Command & Control. Operator has to initiate Jamming from CC.
- Generates Alert & Alarms to nearby Sentry Post
- Detection Range 1000M – 1500M Line of Sight

Integration of CCTV

- Command & Control triggers designated CCTV Camera to airspace view



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PSSAD-500 Technical Specifications

Sl No	Parameter	Specifications
1	Frequency Bands	902 – 925MHz ISM 2400 – 2483MHz ISM 5725 – 5875MHz ISM 1550 – 1610MHz GNSS
2	Detection Range	1000 – 1500 Meters
3	Jamming Range	800 – 1200 Meters
4	Modulation	Fast Frequency Sweep (Chirp)
5	Control & Indicators	On/Off switch & indicator,Central computerized Remote Control
6	Remote Control	Ethernet From Control room by dedi cated software
7	Antennas	Directional / Omnidirectional High G ain antennas
8	Protection	VSWR protection, Overheat Protection: 75℃ cut-off operation & Auto Recovery
9	Casing	Enclosed Metal Casing fitted within o utdoor standard casing
10	Operating Tempe rature	-10℃ to +75℃

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Counter IED – ISM High Band

Operational Characteristics:

Equipment is capable of protecting Small Foot Columns against RCIED operating in multiple bands within a minimum radius of 50M

Range:

Frequency Range : 2000 - 6000MHz
The desired frequency band will effectively cover 2400MHZ & 5800MHZ ISM Bands.

Mechanical Specifications:

Weight: 10Kg (Max)
Weight of Harness: 2Kg (Max)
Dimensions: 350mm x 250mm x 100mm

Environmental Specifications:

Temperature: -100C to +500C
IP 65 protection level to comply with military standard and harsh working conditions

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COUNTER IED - GSM/CDMA/3G

Operational Characteristics:

Equipment is capable of protecting Small Foot Columns against RCIED operating in multiple bands within a minimum radius of 50M

Range:

Frequency Range : GSM (900), GSM (1800), CDMA, 3G

Mechanical Specifications:

Weight: 12Kg (Max)
Weight of Harness: 2Kg (Max)
Dimensions: 350mm x 250mm x 100mm

Environmental Specifications:

Temperature: -100C to +500C
IP 65 protection level to comply with military standard and harsh working conditions

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UNIVERSAL VEHICLE MOUNTED COUNTER IED SYSTEM

Counter-IED equipment are created primarily for military and law enforcement. They are used for standoff detection of explosives and explosive precursor components and defeating the Improvised Explosive Devices (IEDs) devices themselves as part of a broader counter-terrorism, counter-insurgency, or law enforcement effort.

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UNIVERSAL VEHICLE MOUNTED COUNTER IED SYSTEM

Sl No	Band Description	Frequency Range
I. General Band Jammer		
1.	Band-1	20-100 MHz
2.	Band-2	100-520 MHz
3.	Band-3	500-1000MHz
II. Citizen Band Jammer		
4.	Citizen Band -1	136-174 MHz
5.	Citizen Band -2	403-520 MHz
III. ISM/LoRa/Drone Band Jammer		
6.	ISM-433 / LoRa	433-435 MHz, ISM 314-510 MHz, LoRa
7.	ISM-915 / LoRa	902-928 MHz, ISM 779-928 MHz, Lora
8.	ISM-2.4G	2400-2483 MHz
9.	ISM-5.8G	5725-5975 MHz
IV. GSM & CDMA Band Jammer		
10.	GSM Band-1 (2G) /CDMA	935-960MHz, 869-894 MHz
11.	GSM Band-2 (2G)	1805-1860MHz
V. 3G & WCDMA Jammer		
12	3G, WCDMA	2100-2170 MHz
VI. 4G Jammer		
13	4G LTE	2300-2400 MHz
14	4G LTE	2496-2690 MHz
VII. GNSS Jammer		
15	GNSS Lower L band	1164-1300 MHz
16	GNSS Upper L band	1559-1610 MHz
17	Dash Board & Control Unit	

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INTEROPERABLE COMMUNICATION SYSTEM

INTRODUCTION

The RIOS Radio Interoperability System provides interoperability between a range of communications devices, including radios, smartphones, legacy exchange, cameras, VoIP and computers, enabling a fully integrated communications network from anywhere in the world. The RIOS is the solution for enabling users with different vendor devices to seamlessly communicate across any platform.

Control: Daylight readable Windows gateway Controller
Network: Integrated router with LAN, Wi-Fi, and USB cellular data connection access.
Enclosure:Pelican iM2500 roller case: Water resistant,pressure release valve, telescoping handle

High-Density Radio Interface: D-Sub 26-pin connectors for standard and/or remote radio control interface

Power: DC input or AC with power supply provided. DC output for auxiliary devices, 12 Volts at 1.5 amps. Integrated Lind for integrated laptop charging.

Applications

The Radio Interoperability System (RIOS) interoperates dissimilar communication networks by collecting and converting local communication signals into digital IP packets. RIOS consolidates signals from a variety of sources into a single unified operating platform. Control of the system is accomplished via the RIOS Graphical User Interface (GUI). The image below illustrates the RIOS Interoperability Conversion.

RIOS solutions range from standalone & rack servers to tactical interoperability kits, remote-client PCs, and state-wide networks connected across a variety of IP networks. Wide-area RIOS networks can result in fully interoperable communications perimeter unlimited by physical terrain and distance.

The RIOS integrates a TAC2 I/O Module and a MIL-STD-810F Gateway Controller within an environmentally protected FAA-compliant transit case. The rear interfacing TAC2 I/O Module provides eight high-density interface ports for interoperable voice communications. The TAC2 module interfaces to all types of HF, VHF, UHF, 700/800 MHz, cell phones and satellite handsets, allowing the operator to quickly interconnect disparate devices by means of the intuitive Graphical User Interface. On-board power management offers DC input with external lithium ion battery power to the I/O module and PC controller. Network options include LAN with Wi-Fi and/or customer-provided USB data connection. Tactical packaging includes MIL-STD power and interior and exterior USB connectors for computer charging and interface.

High Altitude Surveillance Logistic Drone

Specifications	
Wingspan :	4500mm
Max Payload :	20 kg
Take off weight :	
Take off/ Landing :	VTOL
Cruising Speed :	80 km/h
Endurance :	Min. 1 hr (Max depending upon fuels it carries)
Mission Range	10km
Max climb rate :	5m/s
Max Take Off Altitude	4000 m
Max Ceiling Altitude	5000m
Wind Resistance :	8.0 - 13.8m/s
Temp Operating Range	Max - Betn 20˚C and 30˚C Min - Betn -10˚C and -20˚C
Max fuel capacity :	27 ltr
Stall speed :	52km/h
Engine Specs	
Horse Power:	11.8@7500rpm
Crankcase :	7075 Aluminium
Idle :	1300rpm
Force :	30kgs @ 100 meters
weight :	2.3kgs
Displacement :	116cc
Gas :	87-89 octane
RPM max :	8500RPM
Compartment Size	
Camera	colour day video camera, Monochromatic night Thermal Sensor
Flight Mode	Fully Autonomous Mode, Manual Mode and Return to Home Mode.
Shelf Life	Not less than 1000 landings

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Surveillance Quadcopter Drone

A Quadcopter, also called quadrocopter, or quadrotor is a type of helicopter that has four rotors.
Although quadrotor helicopters and convertiplanes have long been flown experimentally, the configuration remained a curiosity until the arrival of the modern UAV or drone. The small size and low inertia of drones allows use of a particularly simple flight control system, which has greatly increased the practicality of the small quadrotor in this application. The Specifications are as follow.

Surveillance Quadcopter Drone

Specification of Surveillance Quadcopter Drone	
Frame dimension Extended	610*610*510mm
Folded	413*380*510mm
Maximum Take Off Weight	8.025g
Maximum payload	Up to 1.5 kg
Empty weight (without battery & Payload)	3.5 kg
Endurance	70 min
Cruise Speed	5-15 m/s
Max speed	25 m/s
Operational Altitude (AGL)	1000 m
Working Range	5km
Wind resistance	12 m/s
Propulsion type	Electric
Motors	4 - Brushless DC motor
Propeller	Carbon Fibre
Autopilot	Redundant sensor with complex fusion Algorithm Robust Guidance, Navigation and Control Algorithm Industry standard microcontroller with redundancy
Surveillance camera	Video Transmission, 10 km @FHD
Mapping Camera	24Mp, 30F/S, Full HD
Infrared Camera	Detection technology - 7.5 to 13 µm uncooled micro bolometer FP, Resolution- 640 x 480 pixels, Focus - Manual/Auto Temperature Range - 0 to 500° C Accuracy- 1% or 1° C for range up to + 150° C / 2% or 2° C for range above + 150° C Frame/S- 30F/S
Flight Battery Type	Solid state Lithium ION
Operating temp	-10 °C to +55°C

Tear Gas Drone

Specification of Tear gas Quadcopter Drone	
Frame dimension Extended	1400*1300*450MM
Folded	945*848*450MM
Maximum Take Off Weight	15Kg
Maximum payload	Up to 2.5 kg
Empty weight (without battery & Payload)	8 kg
Endurance	25 min
Cruise Speed	6 m/s
Max speed	10 m/s
Operational Altitude (AGL)	60m
Working Range	2 km
Wind resistance	12 m/s
Propulsion type	Electric
Motors	4 - Brushless DC motor
Propeller	Carbon Fiber
Autopilot	Redundant sensor with complex fusion Algorithm Robust Guidance, Navigation and Control Algorithm Industry standard microcontroller with redundancy
Tear Gas mounting provision	4 nos with sliding system
Camera , RF based Loud speaker Mic & Speaker Range, Battery Type, Oper Temp	FPV, 1 Km, Lipo 12s, -10 to +55 Degrees

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Refurbuishment/Bulletproofing of Mpv

Counter Drone System

Operational Characteristics
Jamming of GNSS, Command & Control data,
Telemetry Links
Continuous operation for 2 Hours
Range
Directional Antenna – 2 KM
Omni Antenna – 1 KM
Frequency Bands
433 MHZ ISM, 50Watt
915 MHZ ISM, 50Watt
2400 MHZ ISM, 100Watt
5800 MHZ ISM, 50Watt
GNSS L1 & L2, 50Watt
GNSS L5 50Watt
Band 1: 100-500MHZ, 50Watt
Band 2: 500-1000MHz, 50Watt
Band 3:1000-25000MHz, 50Watt
Band 4: 2500-6000MHz, 50Watt
Modulation
Frequency Modulation
Output Power
550 Watt in all Bands
Environmental Specifications
§ Temperature: -100C to +500C
§ IP 65 protection level to comply with military standard and harsh working conditions
Antenna.
§ Directional, Omni
Life of Equipment
§ 5 years
Special Features
§ Portable and light weight.
§ Rugged, compact and easy to handle.
§ Advanced Digital Signal Processing (DSP)
§ LED indication for failure of transmission and low voltage.

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ISO 9001:2008
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