



IG DEFENCE™
For the Nation with Precision



 Built in Bharat, Built for Bharat & Ready for the World 

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ABOUT US

IG Defence is a premier defence technology company headquartered in India, specializing in the design, development, and deployment of advanced unmanned aerial systems (UAS), short-range missile systems, and counter-unmanned solutions. Our mission is to equip defence forces with mission-ready, combat-proven, and AI-powered aerial and strike capabilities built for modern warfare.

Powered by artificial intelligence, machine learning, and real-time data fusion, our platforms deliver superior performance across surveillance, reconnaissance, autonomous engagement, short-range precision strike, and tactical missions. From long-endurance drones to cutting-edge anti-drone guns, electronic domes, short-range missile platforms, and perimeter defence systems, our solutions are engineered to meet the evolving demands of battlefield operations.

Built on the pillars of resilience, precision, and innovation, IG Defence delivers fully indigenous systems aligned with India's Atmanirbhar Bharat vision, while upholding the highest global defence standards.



Technical SPECIFICATIONS

| Feature | Specification |
|---------------------------|--|
| Platform Type | Long-range one-way attack drone |
| Range | Up to 1,000 km |
| Endurance | 7-8 hours |
| MTOW | 200 kg |
| Payload | 50 kg high-explosive warhead engineered for critical strike |
| Speed | Cruise 160 km/h · Max 200 km/h |
| Operational Altitude | Up to 5,000 m AMSL |
| Operating Temperature | -20 °C to +60 °C |
| Day Camera | 3840 × 2160 (4K UHD) |
| Night Camera | 1280 × 720p Thermal EO/IR |
| Guidance & Navigation | EW-hardened multi-layered guidance |
| Communication / Data Link | Encrypted RF datalink — SATCOM relay option for beyond line of sight |
| Launch & Deployment | Inclined rail launcher with rocket-assisted takeoff |
| Use Cases | Strikes infrastructure, radar sites, air defence batteries, soft and semi-hardened targets at operational depth. |
| IP Rating | IP55 |
| EMI/EMC & Standards | MIL-STD-461E · MIL-STD-810G |



An indigenous FPV combat drone engineered for precision strike missions, delivering rapid response, high-impact engagement, and battlefield dominance in contested environments

Technical SPECIFICATIONS

| Feature | Specification |
|---------------------------|---|
| Platform Type | FPV Striker Drone |
| Range | 20 km |
| Endurance | Up to 50 mins |
| MTOW | 12 kg |
| Payload | Up to 5 kg |
| Speed | Cruise 80 km/h · Loiter 100 km/h · Sprint 120 km/h |
| Operational Altitude | Up to 5,000 m AMSL |
| Operating Temperature | -20 °C to +60 °C |
| Day Camera | 1920 × 1080p digital or 1500 TVL analog — payload configurable as per requirement |
| Night Camera | 640 × 512p thermal / low-light digital or analog — payload configurable as per requirement |
| Guidance & Navigation | Operator in the loop, end to end. GNSS waypoint fallback when the operator chooses to hand off. |
| Communication / Data Link | Encrypted RF datalink — real-time control and video. Low-latency video for terminal guidance |
| Launch & Deployment | Hand-launched, under 1 minute to deploy |
| Use Cases | ISR, grenade drop, kamikaze strike. Close-fight precision against armoured vehicles, and fortifications |
| IP Rating | IP54 |
| EMI/EMC & Standards | MIL-STD-461E · MIL-STD-810G |



Fiber-optic tethered FPV drone delivering jam-resistant, high-bandwidth real-time video transmission for precision strike and reconnaissance missions in EW-contested environments

Technical SPECIFICATIONS

| Feature | Specification |
|----------------------------------|---|
| Platform Type | Fiber-optic guided FPV |
| Range | Fiber length up to 10 km |
| Endurance | Up to 50 mins |
| MTOW | 12 kg |
| Payload | Strike payload: high-explosive warhead, Onboard ISR — day and thermal / low-light sensors — for terminal guidance |
| Speed | Cruise 80 km/h · Loiter 100 km/h · Sprint 120 km/h |
| Operational Altitude | Up to 5,000 m AMSL |
| Operating Temperature | -20 °C to +60 °C |
| Day Camera | 1920 × 1080p digital or 1500 TVL analog — payload configurable as per requirement |
| Night Camera | 640 × 512p thermal / low-light digital or analog — payload configurable as per requirement |
| Guidance & Navigation | Operator-in-the-loop over fiber — immune to RF jamming and spoofing |
| Communication / Data Link | Fiber-optic spool — jam-proof, RF-silent, real-time control and video. Sub-millisecond latency |
| Launch & Deployment | Hand-launched |
| Use Cases | Counter-EW operations, urban and underground reconnaissance, high-value strikes inside heavily jammed bubbles |
| IP Rating | IP54 |
| EMI/EMC & Standards | MIL-STD-461E · MIL-STD-810G |



A heavy lift logistics drone designed for reliable aerial delivery in defence operations and humanitarian missions.

Technical SPECIFICATIONS

| Feature | Specification |
|----------------------------------|---|
| Platform Type | Heavy-lift logistics UAV |
| Range | 10 km |
| Endurance | 40–50 mins unloaded • 25–35 mins at max payload |
| MTOW | 200 kg |
| Payload | Up to 80 kg |
| Speed | 60 km/h |
| Operational Altitude | Up to 5,000 m AMSL |
| Operating Temperature | -20 °C to +60 °C |
| Day Camera | 1920 × 1080p baseline. 2K and 4K configurations available |
| Night Camera | 640 × 512p Thermal EO/IR |
| Guidance & Navigation | GNSS waypoint navigation with RTK precision landing. EW Compliant. Pre-planned routes with obstacle avoidance |
| Communication / Data Link | Encrypted RF datalink with AES 256 Full telemetry, payload status, and live video |
| Launch & Deployment | VTOL — under 5 minutes to set up |
| Use Cases | Resupplies high-altitude posts, forward border outposts, and casualty-evacuation lines. Delivers when ground routes are denied |
| IP Rating | IP55 |
| EMI/EMC & Standards | MIL-STD-461E • MIL-STD-810G |



Technical SPECIFICATIONS

| Feature | Specification |
|----------------------------------|--|
| Platform Type | ISR Quadcopter |
| Range | 20 km |
| Endurance | 90 mins free-flight Continuous tethered (24+ hr standard, extendable per mission) |
| MTOW | 8 kg |
| Payload | Up to 1.5–2 kg modular ISR payload |
| Speed | Max 60 km/h |
| Operational Altitude | Up to 5,000 m AMSL |
| Operating Temperature | -20 °C to +60 °C |
| Day Camera | 1920 × 1080p baseline. 2K and 4K configurations available |
| Night Camera | 640 × 512p thermal EO/IR |
| Guidance & Navigation | GNSS-denied navigation — operates through jamming and spoofing. EW Compliant. Mission continues through degraded environments |
| Communication / Data Link | Encrypted RF datalink — AES-256. Full-motion video and telemetry to GCS. Mesh-capable for multi-asset coordination |
| Launch & Deployment | VTOL — under 5 minutes to set up |
| Use Cases | Border surveillance, counter-infiltration, route reconnaissance, and persistent monitoring of suspect activity along the line of contact |
| IP Rating | IP55 |
| EMI/EMC & Standards | MIL-STD-461E · MIL-STD-810G |



An indigenous VTOL ISR platform delivering long-endurance intelligence, wide-area surveillance, and rapid situational awareness across complex and high-altitude terrains

Technical SPECIFICATIONS

| Feature | Specification |
|----------------------------------|--|
| Platform Type | VTOL hybrid ISR platform |
| Range | 20 km |
| Endurance | Up to 120 min |
| MTOW | 12 kg |
| Payload | RGB baseline. Multispectral, thermal, and mission-specific payloads available |
| Speed | Cruise: 60–80 km/h · Max: 100 km/h |
| Operational Altitude | Up to 5,000 m AMSL |
| Operating Temperature | –20 °C to +55 °C |
| Day Camera | 1920 × 1080p baseline. 2K and 4K configurations available |
| Night Camera | 640 × 512p thermal EO/IR |
| Guidance & Navigation | Onboard autonomy through GNSS denial, jamming, and spoofing. Multi-layer EW counter-measures. In-flight target tracking, terrain avoidance |
| Communication / Data Link | Encrypted telemetry and HD video downlink. Ground relay station extends range over broken terrain |
| Launch & Deployment | VTOL — no runway, no catapult. Operates from confined sites |
| Use Cases | Long-endurance ISR and wide-area surveillance over complex terrain |
| IP Rating | IP55 |
| EMI/EMC & Standards | MIL-STD-461E · MIL-STD-810G |



Next-generation AI swarm UAV platform delivering autonomous coordinated operations across centralized, distributed, and hybrid intelligence frameworks

Technical SPECIFICATIONS

| Feature | Specification |
|----------------------------------|---|
| Platform Type | AI-enabled swarm UAV system — centralized, distributed, or hybrid intelligence |
| Range | 10 km |
| Endurance | Up to 45 mins |
| MTOW | 5 kg per node |
| Payload | Up to 1.5 kg modular mission payload |
| Speed | Cruise 80 km/h · Loiter 100 km/h · Sprint 120 km/h |
| Operational Altitude | Up to 6,000 m AMSL |
| Operating Temperature | -20 °C to +60 °C |
| Day Camera | 1920 × 1080p digital or 1500 TVL analog — payload configurable as per requirement |
| Night Camera | 640 × 512p thermal / low-light digital or analog — payload configurable as per requirement |
| Guidance & Navigation | Autonomous navigation with real-time swarm coordination. Swarm continues mission if individual nodes are lost. No single point of failure |
| Communication / Data Link | Encrypted mesh radio — peer-to-peer relay across the swarm. Self-healing network |
| Launch & Deployment | Sequential or simultaneous. The whole swarm in the air on one command |
| Use Cases | Urban, open terrain, tactical zones. ISR and emergency missions at scale. Saturation strikes against air defences |
| IP Rating | IP54 |
| EMI/EMC & Standards | MIL-STD-461E · MIL-STD-810G |



An indigenous short-range missile system engineered for rapid response and battlefield precision, strengthening India's sovereign strike capability through indigenous design and manufacturing

Technical SPECIFICATIONS

| Feature | Specification |
|------------------------------------|---|
| Platform Type | Short-Range Surface-to-Air Missile & Surface-to-Surface Missile |
| Mission Role | Air Defence against fighter aircraft, cruise missiles, UAVs, and precision-guided munitions |
| Engagement Range | 10 - 100 km (extended short-range engagement envelope) |
| Engagement Altitude | 50 m to 20,000 m (sea-skimming to high-altitude targets) |
| Fuze System | Proximity fuze (RF) + Impact fuze with safety-arming device |
| Propulsion System | Dual-pulse solid rocket motor with high specific impulse |
| Guidance System | Mid-course command guidance + Active RF Seeker (terminal phase) |
| Seeker Type | Active Radar Homing (ARH) with Ku-band/X-band AESA seeker |
| Warhead | Pre-fragmented High-Explosive (HE) warhead - 55-60 kg with proximity fuze |
| Launch Configuration | Vertical Launch System (VLS) - canisterized |
| Reaction Time | < 15 seconds (target detection to missile launch) |
| Radar System | Multi-Function AESA Radar - 360° azimuth coverage, 120-150 km detection range |
| Network Centricity | Integrated Air Command & Control System (IACCS) compatible, Net-Centric Warfare ready |
| Counter-Measures Resistance | ECM/ECCM hardened, frequency-agile radar, anti-jamming capability |



NANDI

An autonomous tactical unmanned ground vehicle engineered for evacuation, landmine deployment and disposal, short-range missile launch operations.

Technical SPECIFICATIONS

| Feature | Specification |
|---|---|
| Platform Type | Unmanned Ground Vehicle (UGV) - AI-enabled autonomous tactical platform designed for multi-mission deployment across varied terrain |
| Guidance & Navigation | Advanced AI-Based Navigation System with autonomous path planning, and adaptive route optimization |
| Operational Range | 45 kilometers extended operational radius enabling sustained deep-area missions and remote area accessibility |
| Endurance | 3-4 hours continuous operational deployment with extended mission capability |
| Payload Capacity | 500 kilograms multi-mission payload integration supporting diverse operational requirements and equipment configurations |
| Mission Profile - Evacuation | Autonomous evacuation support with tactical route planning for casualty extraction |
| Mission Profile - Explosive Ordnance | Landmine planting, detection, and controlled diffusion with remote operation capability for hazardous area clearance |
| Mission Profile - Weapons Platform | Short-range missile launch platform with autonomous targeting and fire-control integration |
| Mission Profile - Autonomous Weapons | Rifle mounting system with autonomous target acquisition and autonomous firing capability for tactical engagement |
| Autonomous Operations | Fully autonomous mission execution with real-time decision-making, and tactical adaptability |
| AI Intelligence System | Machine learning-enabled threat recognition, terrain analysis, and mission-adaptive autonomous behavior protocols |
| Mobility Architecture | High-mobility chassis with all-terrain capability, and adaptive suspension for operational flexibility |
| Sensor Suite | Integrated multi-sensor array and threat detection systems for comprehensive situational awareness |
| Communication System | Encrypted tactical communications, real-time telemetry, and operator command capability with extended range data link |
| Power Management | Autonomous battery management system with extended endurance optimization |
| Tactical Deployment | Rapid deployment capability for emergency response, border security, and counter-terrorism operations |



T-SHUL BEAM

Tactical 8-channel anti-drone gun providing portable, directional RF jamming for soft-kill counter-UAS engagements in field operations

Technical SPECIFICATIONS

| Feature | Specification |
|---|---|
| System Type | Handheld 8-Channel Anti-Drone Gun Jammer (Counter-UAS, soft-kill) |
| Jamming Frequency Bands | 433 MHz, 915 MHz, 1.2 GHz, GNSS L1 (1575 MHz), GNSS L2 (1176 MHz), 2.4 GHz, 5.2 GHz, 5.8 GHz — customisable as per end-user requirement |
| Jamming Technique | Directional broadband RF jamming on selected bands to disrupt UAV command-and-control (C2), telemetry, video downlink and GNSS navigation links |
| Effective Jamming Range | Up to 3 km (line-of-sight, interference-free conditions) |
| Power Source | Rechargeable Li-ion battery pack (hot-swappable) |
| Battery Life | Approx. 1.5–3 hours continuous jamming (depending on number of active bands and output power) |
| Environmental & EMC Compliance | IP55; MIL-STD-461E (EMI/EMC); MIL-STD-810G (shock, vibration, salt fog) |
| Operational Safety | Hardware safety lock / trigger interlock; standalone operation with no external data connectivity |
| Output Power per Channel | Up to 50 W per channel; user-selectable power levels per band via hardware selector |
| Weight & Form Factor | Approx. 3.5 kg with battery, single-operator deployment |
| Operating Temperature | -20°C to +55°C operating; -40°C to +70°C storage |
| Antenna Configuration | 8 integrated directional antennas; approx. 30°–45° beam width per band; front-mounted array providing high-gain forward radiation |
| Charging & External Power | AC charger 230 V / 50 Hz (Indian mains); 12 V / 24 V vehicle DC adapter |
| Control Interface | Per-channel ON/OFF toggle switches; LED band-status indicators |



Vehicle-based electronic warfare system on Bofors platform for jamming, spoofing, and radar denial

Technical SPECIFICATIONS

| Feature | Specification |
|---|--|
| System Type | L/70 Bofors-integrated Counter-UAS Jamming System |
| Jamming Frequency Bands | 433 MHz, 900 MHz, 1.2 GHz, GNSS L1/L2 (GPS, GLONASS, Galileo, BeiDou, NavIC), 2.4 GHz, 5.2 GHz, 5.8 GHz — customisable |
| Jamming Technique | Wideband CEMT with spot, barrage & follow-on (reactive) modes |
| Effective Jamming Range | Up to 3 kilometers with real-time signal detection and responsive jamming deployment |
| Power Source | L/70 mount supply (AC mains / onboard generator) |
| Output Power per Channel | Up to 100 W; 150 MHz instantaneous bandwidth; simultaneous multi-band jamming |
| Environmental & EMC Compliance | IP65; MIL-STD-461E (EMI/EMC); MIL-STD-810G (shock, vibration, salt fog) |
| Operational Safety | Hardware interlock with gun FCS; auto RF cut-off during firing; emergency kill-switch |
| Engagement Capabilities | RF jamming, GNSS spoofing, metadata & fault injection; safe-landing redirection |
| Weight & Form Factor | Add-on assembly within L/70 mount's balance and load limits |
| Operating Temperature | -20 °C to +55 °C operating; -40 °C to +70 °C storage |
| Antenna Configuration | Multi-band directional panel/Yagi array bore-sighted with gun barrel; with omni for look-through |
| Integration with L/70 Mount | Slaved to gun azimuth/elevation drives, FCS, EOFCS and FCR; track-while-scan up to 25 targets |
| Sensor & FCS Integration | Integrated with passive RF detector, Radar and EO/IR suite of L/70 Drone Guard System (DGS) |
| Control Interface | Ruggedised tablet; GIS map overlay; 1,000-record threat library |



T-SHUL ARC

Vehicle-mounted electronic warfare jammer system designed for tactical signal disruption, radar countermeasures, and broad-spectrum electromagnetic denial operations

Technical SPECIFICATIONS

| Feature | Specification |
|---|--|
| System Type | Vehicle-mounted multi-band RF counter-UAS jamming system |
| Jamming Frequency Bands | 350–470 MHz, 800–1000 MHz, 1100–1300 MHz, 1300–1500 MHz, 1500–1700 MHz, 2300–2500 MHz, 5100–5300 MHz, 5700–5900 MHz (Frequency Customizable) |
| Jamming Technique | Broadband RF noise for denial of UAV C2, telemetry, video & navigation links |
| Effective Jamming Range | Up to 3 kilometers with sustained operational coverage across multi-frequency threat vectors |
| Power Source | Vehicle 24 V DC primary supply with internal battery backup; AC 230 V / 50 Hz mains compatibility for static deployment |
| Output Power per Channel | Up to 100 W per channel; user-selectable power levels per band |
| Environmental & EMC Compliance | IP65; MIL-STD-461E (EMI/EMC); MIL-STD-810G (shock, vibration, salt fog) |
| Environmental Capability | Ruggedized enclosure for mobile platforms; operating temperature -20 °C to +55 °C |
| Operational Safety | Hardware safety interlock; emergency RF cut-off switch; standalone operation with no external data connectivity |
| Antenna Configuration | 8-band omnidirectional antenna array (roof-mounted); optional directional antennas for sector-specific high-gain operation |
| Weight & Form Factor | Modular rack-mount chassis suitable for SUV / LMV Mine-Protected Vehicle integration |
| Operating Temperature | -20 °C to +55 °C operating; -40 °C to +70 °C storage |
| Control Interface | Ruggedised in-vehicle control panel with per-band ON/OFF switches; LED band-status indicators; remote operation via wired tether from cabin |
| Mobility & Deployment | On-the-move (mobile) and stationary jamming capability; rapid deployment with operational readiness in under 2 minutes from vehicle start-up |
| Communication & Integration | Ethernet / RS-422 / CAN-bus interface; supports integration with passive RF detection system, radar and C-UAS C2 network |



T-SHUL HORIZON

Tactical RF detection and direction-finding system for comprehensive electromagnetic spectrum monitoring and threat analysis

Technical SPECIFICATIONS

| Feature | Specification |
|---|--|
| System Type | Portable / fixed Passive RF Drone Detection System |
| Detection Technique | Passive RF spectrum monitoring with signal analysis (no active emission — fully covert) |
| Detection Frequency Bands | 300 MHz – 6 GHz |
| Maximum Detection Range | Up to 6 km (line-of-sight, low-RF-clutter environment) |
| Detection Coverage | 360° omnidirectional with drone signal direction (bearing) indication (DoA — Direction of Arrival) |
| Target Identification Capability | UAV control link, telemetry & video link identification; black/white list support; recognition of common protocols |
| Environmental & EMC Compliance | IP65 ingress protection; MIL-STD-461E (EMI/EMC); MIL-STD-810G (shock, vibration, drop, salt fog); operating temperature -40 °C to +70 °C |
| Operational Safety | Fully passive (non-emitting) operation; no RF transmission — covert and licence-exempt |
| Drone Library / Database | Built-in library of 500+ commercial UAV signatures; field-upgradable database via secure firmware update |
| Simultaneous Detection | Capable of detecting and tracking multiple drones simultaneously (typically up to 8-16 targets) |
| Detection Latency | < 2 seconds from signal acquisition to alert generation |
| Bearing Accuracy | ±5° angular accuracy (azimuth) for drone direction-of-arrival indication |
| Power Source | AC 230 V / 50 Hz mains; rechargeable Li-ion battery for portable mode (4-6 hours endurance); 12 / 24 V DC vehicle adapter |
| Weight & Form Factor | Approx. 6-8 kg portable unit (with antenna and battery); tripod-mounted or vehicle / mast-mounted in fixed configuration |
| User Interface & Display | Ruggedised tablet with real-time spectrum waterfall, drone alert dashboard and audio / visual alarm |



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