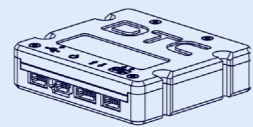


## The BluSDR™ Family Hardware Platforms

The BluSDR™ family is a streamlined range of wideband IP radio links each chosen to offer class-leading performance in a range of Uncrewed systems applications in the air, on the ground and at sea.

### BluSDR™ - 6

The BluSDR™- 6 is ideal for size and weight critical UxV applications. Weighing only 0.9oz / 26g, the BluSDR™-6 is smaller than a standard credit card.



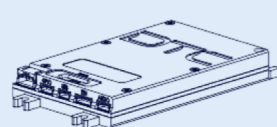
### BluSDR™ -6

**SHORT RANGE**  
from 26g | 6km | 400mW  
3W consumption  
Up to 87Mbps throughput  
2 x USB Ports



### BluSDR™ - 30

The BluSDR™-30 has been designed to be the core of a wide range of systems. Weighing only 3oz / 85g, the BluSDR™-30 is the thickness of a pencil and the width of a playing card.



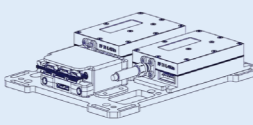
### BluSDR™ -30

**MEDIUM RANGE**  
from 85g | 30km | 2W  
6W consumption  
Up to 87Mbps throughput  
2 x USB Ports  
Ethernet



### BluSDR™ - 90 - L

The BluSDR™-90-L is a lighter option designed for Long Range capable UxV platforms. With its small form factor, the BluSDR™-90-L is suitable for installation both as a mobile and fixed site system.



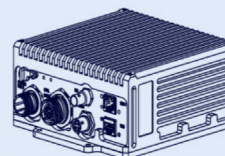
### BluSDR™ - 90-L

**LONG RANGE**  
600g | 90km | 10W  
Up to 87Mbps throughput  
USB Port  
Ethernet  
Serial



### BluSDR™ - 90

The BluSDR™-90 is a robust option designed for Long Range capable UxV platforms. With its small form factor and designed for environmental resistance, the BluSDR™-90 is suitable for installation both as a mobile and fixed site system.



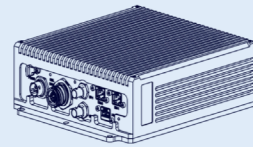
### BluSDR™ - 90

**LONG RANGE**  
2.5kg | 90km | 10W  
Up to 87Mbps throughput  
USB Port  
2 x Ethernet, 2 x Serial  
Audio



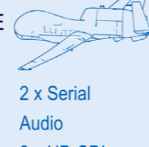
### BluSDR™ - 200

The BluSDR™-200 is DTC's highest power Mesh product and provides up to 30W total RF power output for extreme long range applications.



### BluSDR™ - 200

**EXTRA LONG RANGE**  
5kg | 200km | 30W  
Up to 87Mbps throughput  
USB Port  
2 x Ethernet



## The BluSDR™ family of products

This brochure on the BluSDR™ family is part of a series of brochures on our core products: Video, Mesh, Broadcast and Audio.

### Other related brochures



# The BluSDR™ Family Uncrewed Communications Links

For more information about our BluSDR™ family of products or any other DTC solutions, contact your Sales Account Manager or one of our Regional Sales Offices. Or email us at [info@domotactical.com](mailto:info@domotactical.com)

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BluSDR™ radios deliver exceptional real-world range, unrivalled throughput and robustness, thanks to the DTC MeshUltra™ family of COFDM IP Mesh waveforms. The DTC proprietary waveforms operate as a Mobile Adhoc Network (MANET) and combine multiple cognitive features to deliver outstanding performance in the most challenging environments.

Each MeshUltra™ waveform is suitable for a specific application, from swarming drones to point to point links and are interchangeable on any of the DTC software defined radio platforms. DTC have one of the widest ranges of hardware products catering for the smallest, lightest, lowest power OEM modules for miniature UAV's to ruggedized MIL spec radios, ideal for maritime, ground vehicle and control station applications. Frequency options span from 340MHz to 6GHz as well as combining bands for tri-band capable products. Each band typically has 500Mhz of frequency to choose from, one of the widest ranges in the industry.

BluSDR™ radios deliver self-forming, self-healing Mesh Networks from a two radio point to point link, right up to 144 radios in a dynamic mesh network. DTC has also developed a point to multipoint methodology, allowing for different frequency up- and downlinks for certain operational scenarios.

## Uncrewed Systems

DTC is a pioneer in the creation of wireless RF uncrewed communication solutions. Uncrewed systems are becoming essential assets to many military and non-military applications.

### Uncrewed Communication Applications

- Policing and Surveillance
- Search & Rescue
- Disaster Management
- SIGINT/EW
- Intelligence, Surveillance, Reconnaissance (ISR)
- Humanitarian Aid & Disaster Recovery (HADR)
- First Responders
- Battlefield Management Systems
- Military Border & Maritime Security
- Broadcast
- Environmental Monitoring
- Entertainment



The classifying requirements for uncrewed are centered around their range and endurance as well as the need for negligible latency from glass to glass, and secure, robust control with real-time video. In military sectors there is the continuing need to unstoppable, countering active jamming and Electronic Warfare threats, and delivering the mission objectives.

Our radio products are developed by a 60-strong engineering team based in the US and Europe, with combined expertise in RF, MANET Mesh networks, video encoding, hardware design and certification. We are renowned for developing a strong 'technical partnership' between DTC and the uncrewed platform design team.

## Uncrewed Aerial Vehicles (UAV)

DTC continues to partner with world leading UAV solution providers. The BluSDR™ products are built to compliment the needs of the smallest to the longest-range UAV platforms, and DTC prides itself in providing packages that are tailored to each specific requirement.

DTC hardware offerings combine the best combination of, size, weight, power output as well as power draw which are crucial to provide UAV's with the longest ranges possible. Specific hardware options can maximize the transmission distances and minimize the battery draw for the longest flight times. Lightweight OEM options exist from 200mW right up to 10W.

Multiple software options allow for versatility according to the operational requirements. There are three different options of waveform depending on the number of radios required and the volume of data throughput needed. Up to 87Mbps can be achieved across the Mesh network, one of the highest in the market today when combined with MiMo antennas. DTC also offer the most flexible bandwidth settings from 1.25MHz right up to 20MHz, 15 different options to maximize throughput and range.



Optional software applications such as the DTC Interference Avoidance Scheme (IAS) provide Interference detection and mitigation: Advanced signal processing techniques can be utilized to detect and mitigate interference using dynamic channel selection techniques. This means jamming and interference can be avoided by automatically switching to an interference-free channel. With a minimum of 500Mhz of frequency to choose from in each band, finding an uncontended channel is simple.

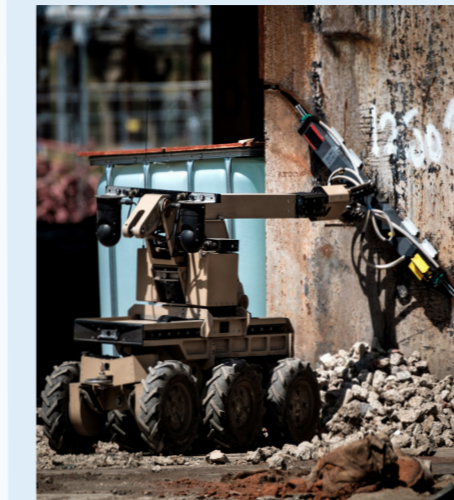
DTC are tried, tested and proven in Military situations as well as commercial, with one of the most extensive portfolio offerings, catering for every operational need.

## Uncrewed Ground Vehicles (UGV)

The rise in global demand for uncrewed and connected systems has created a requirement for innovative, reliable, and secure connectivity solutions. We are proven in service, with over 5,000 DTC radios on Uncrewed Ground Vehicles (UGVs) in Defense, Law Enforcement and Public Safety applications.

Uncrewed ground systems are more likely to suffer from interference in the congested wireless environment that we live in today. DTC have over 2750 MHz of frequency available to operate in over UHF, L, S and C band, and can avoid the heavily congested bands like the ISM, Wi-Fi and Cellular allocations.

With an easy-to-use spectrum analyzer built into the GUI, it is easy to find a clear area of spectrum to form a mesh network for secure, reliable communications. All DTC radios have the option of FIPS 140-2 accredited encryption to make sure you comply with one of the securest cryptographics modules.



## Uncrewed Surface Vehicles (USV)

Communicating at sea comes with its own challenges of harsh environments, with a constantly changing environment that will affect line of sight dependent on the peak or trough of a wave.

DTC have the option of 2-way diversity transmit and 4-way diversity receive radios.

Having four antennas on the receive radio greatly increases the chances of transmission being received. DTC radios can operate in a Robust MiMo mode and combine the use of multipath and Quasi beamforming to provide greater robustness than a single transmit approach and are revolutionizing communications between vessels at sea.

Our Maritime Mesh offers wireless IP Mesh connectivity which can be used for shore (GCS) to sea (USV), as well as between uncrewed and uncrewed vessels. This enables duplex data links for telemetry control, video and for IP data transfer between vessels and control stations for seamless exchange of data, audio and general network traffic.



## Other Uncrewed Applications

**Broadcast and Filmmaking** – UAVs are growing in popularity for everything from aerial photography to camera support replacements for cranes, dollies, and tripods. DTC's subminiature, smallest, lightest on-board transmitters are the first choice among discerning crews who can't compromise on quality.

**Agriculture** – Large farm operators optimize manpower through the deployment of uncrewed vehicles for an array of tasks including spraying, inspection, surveying, planting, and data collection to optimize crop yields.

**Mining** – Heavy equipment mine operators utilize Autonomous Haulage Systems (AHS) to optimize the movement of ore and mined materials, autonomous drilling and blasting, fleet management, obstacle detection and avoidance, as well as UAVs for survey, mapping, inspection, and safely operating in harsh environments.

**Industrial and Environmental** – A wide array of industries from Energy to Construction, from Passenger and Cargo Transport to Power Generation and Transmission, utilize uncrewed vehicles for inspection, survey, mapping, transport, surveillance, and to make operations safer for personnel and equipment.