

ANTENNAS FOR UNCREWED SYSTEMS







As the demand for Unmanned Vehicle Systems (UxVs) increases, so does the need for a wider range of antennas for payloads, data communications systems, command and control. Performance requirements and cost criteria are an important consideration when selecting the antenna.

At Videosys we understand that performance is critical to mission success. Our high-performance products are ideal for aerospace, military, defence and security applications, particularly for the demanding environments of UxVs.

Videosys has a range of standard cost-effective, high-performance antenna designs that are already used on UxVs across the globe



With decades of experience in designing, manufacturing and servicing RF, Radio and Video Transmission products and systems we offer a wide range of high performance, rugged antennas that are proven, trusted and preferred.

Our SHF Antennas are available in frequency bands from 1.0 GHz to 7.5Ghz covering L, S and C band. We also offer a custom design and development service both for antennas as well as a custom design and engineering service.



CORE RANGE ANTENNAS

Videosys has a wide range of antennas that are designed and manufactured in house. For an overview of types, specifications and frequencies from our core range, please see below.

Our R&D team are currently working on several new designs and we welcome custom enquiries. Should you wish to discuss a bespoke requirement please speak to our sales team.

You can track newly released products on our linkedin page.



CORE ANTENNA OVERVIEW

Antenna Type		Omni Short Vertical	Omni Flex Vertical	Omni Long Flex Vertical	180 Degree Sector	80 Degree Sector	Blade	Helical	Dome
Gain		3 dBi	3 dBi	3 dBi	6 dBi	9 dBi	2.5 dBi	4.5 dBi	2.5 dBi
Available Frequencies GHz	1.2-1.4 1.3-1.5 1.4-1.6 2.0-2.7 3.0-3.7 4.4-5.0 4.4-5.9 6.0-7.5	>>>>>>	>>>>>>	>>>>>>	•	• > > > > > >	•	•	•
Available Connectors	N Type TNC SMA BNC IN 4.3/10	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	>>>>	*	•	•	· · · · · · · · · · · · · · · · · · ·	•	· · · · · · · · · · · · · · · · · · ·

• Custom Frequencies may be available upon request



UAVS & DRONES

We supply both off-the-shelf and custom antenna solutions for dynamic and fast-moving aerial platforms including UAVs, Drones and RPAS (remotely piloted aircraft systems).

We offer a selection of antennas in various form factors and frequency ranges. Our versatile antennas can be used in ground-to-air and air-to-ground communications systems.

Our Low-profile, Low SWAP and ultra lightweight blade antennas are ideally suited to for UAVs and mobile platforms weighing less than 27gms



UGVS & GROUND ROBOTICS

Videosys has proven expertise in unmanned ground systems (UGVs). Antennas that are used on UGVs are, in general, rugged, flexible dipole and colinear antennas with omni-directional coverage. They need to be durable and robust to avoid link breakdown or damage in ground-toground operations.

Our rugged and flexible antennas are ideal for UGVs and mobile robotics systems operating in challenging terrain and difficult RF conditions such as cluttered and NLOS (non-line of sight) environments. Standard flange mounting arrangements are available, however special mounting arrangement can be custom designed.



USVS & MARITIME OPERATIONS

Connectivity is particularly challenging in maritime environments, due to limited infrastructure and problems like reflection on the water and the fresnel zone. These can significantly impede connectivity.

Our Antennas are highly suited to marine based USVs (uncrewed surface vessels) and ASVs (autonomous surface vessels) operating in these challenging maritime environments. With a choice of Omni Dipole, Colinear and Sector Antennas with up to 9dBi of gain our antennas enhance the performance of MANET mesh radios for LOS operations.





GOOSENECK ANTENNAS

Responding to the increasing demand for ruggedised and flexible Gooseneck Antennas for Battlefield Communication applications, Videosys now provides flexible Gooseneck Antennas for use with our Omni and Sector/Directional Antennas including fitting with N-Type and TNC connectors.

At Videosys we also provide custom and bespoke design solutions for any UxV antenna requirements as well as for mobile, adhoc and deployable battlefield requirements.







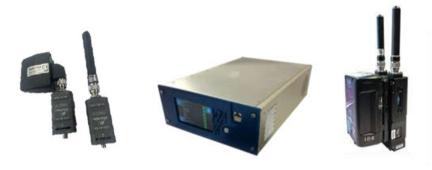
TRANSMITTERS

Videosys has designed and developed a range of COFDM and Mesh radio enclosures and solutions



RECEIVERS

Videosys designs and builds a range of COFDM and Mesh receivers from 19" rack solutions to portable and handheld products



CUSTOM ENGINEEERING

Videosys also provides a custom design and engineering service.

To speak to one of the team about your requirements, please get in touch with the contact details below.





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