



Antennas



Gigawave designs and manufactures a wide range of antennas to suit all microwave transmission requirements. The antennas are designed to perform in all conditions, and are used everyday throughout the world in a variety of broadcast and security applications.



Omni/Hemi Antennas CO4-Omni CH02-Hemi

The CO4 and CH02 are circular polarised antennas designed to allow unrestricted movement of a transmitter or receiver. Both units provide full 360 degree coverage whilst the CH02 also has vertical in-fill which makes it particularly suitable for transmission to and from helicopters.

	CO4	CH02
Gain	4dBi	2dBi
Frequency	Available 1.3 - 13.8GHz	
Bandwidth	Typically 12% of RF frequency	
Axial Ratio	2dB (nom.)	2dB (nom.)
Pattern	Omnidirectional	Hemispherical
-3dB Point	40°	180°
Polarisation	Right or left circular	
Height	Frequency dependent	
Diameter	Contact factory for further information	



Helix Antennas HX14-Hand Held Helix SX18-Single Helix DX21-Dual

Helix antennas are all circular polarised and have good axial ratio characteristics. As such they are ideally suited to a wide range of ENG applications where high directivity is important.

	HX14	SX18	DX21
Gain	14dBi	18dBi	21dBi
Frequency	Available 1.3 - 7.8GHz		
Bandwidth	Up to 20% of RF frequency		
Axial Ratio	2dB (nom.)	2dB (nom.)	2dB (nom.)
Pattern	Directional		
-3dB Point	40°	27°	20°
Polarisation	Right or left circular		
Height	Frequency dependent		
Diameter	Contact factory for further information		



Low-Profile Antennas

The main advantages offered by low-profile patch antennas are low weight and minimum wind load. Typical applications are on-board camera systems, uplinks, downlinks, and other situations where minimal wind loading is required.

	PA6	PA9	PA12	PA18
Gain	6dBi	9dBi	12dBi	18dBi
Frequency	Available 1.3 - 13.8GHz			
Bandwidth	Typically 10% of RF frequency			
Axial Ratio	2dB (nom.)	2dB (nom.)	2dB (nom.)	2dB (nom.)
Pattern	Directional			
-3dB Point	90°	60°	40°	40°
Polarisation	Right or left circular			
Height	Frequency dependent			
Diameter	Contact factory for further information			



Fan Beam Antennas

The FB10 and FB13 are high gain antennas providing 90 degree sector coverage. They are commonly installed on buildings and use remote switching to provide complete north/south/east/west coverage for central receive sites. Fan Beam antennas are also used to receive signals from digital wireless camera systems in sports stadiums and other locations.

	FB10	FB13
Gain	10dBi	13dBi
Frequency	Available 1.3 - 13.8GHz	
Bandwidth	Typically 10% of RF frequency	
Axial Ratio	2dB (nom.)	2dB (nom.)
Pattern	Directional	
-3dB Point H Plane	90°	90°
-3dB Point E Plane	40°	26°
Polarisation	Right/left circular or horizontal/vertical	
Height	Frequency dependent	
Diameter	Contact factory for further information	



Collinear Antennas - COL series antennas provide 360 degree coverage with relatively high gain. This makes them ideal as a cost effective central receive antenna or as a transmit antenna in specialised mobile applications. CPCOL antennas offer circular polarisation, which allows operation in medium multipath surroundings. They are therefore suitable for short to medium range helicopter air to ground transmissions.

Parabolic Antennas - Feeds are available from 0.8GHz to 24GHz with spun aluminium reflectors from 0.3m to 1.2m. These are ideal for portable point-to-point and long distance outside broadcast applications.

Horn Antennas - Available in a variety of designs to suit specific customer requirements, using either conventional or stripline construction for minimum size and weight. Typical applications are hand held mobile or short range point-to-point transmissions in frequency bands above 7GHz.

Specialised Antennas - Gigawave is always pleased to design antennas to meet special customer requirements.

Gigawave designs and manufactures a wide range of portable and fixed microwave equipment for television outside broadcasts, electronic newsgathering and security applications.

Important Information:

Some products are supplied in SD (Standard Definition) only versions. Please contact the Gigawave Sales Team for HD (High Definition) upgrade options.

Specifications may alter at the discretion of Gigawave or to meet customer specific requirements.