

GD2135

CHELTON

V/UHF Ground Antenna

The GD2135 is a permanently deployable ground antenna covering the frequency range 30 MHz to 400 MHz.

It is intended for use either with multi-band 30 MHz to 400 MHz radios or with individual radios covering some portion of this frequency band.

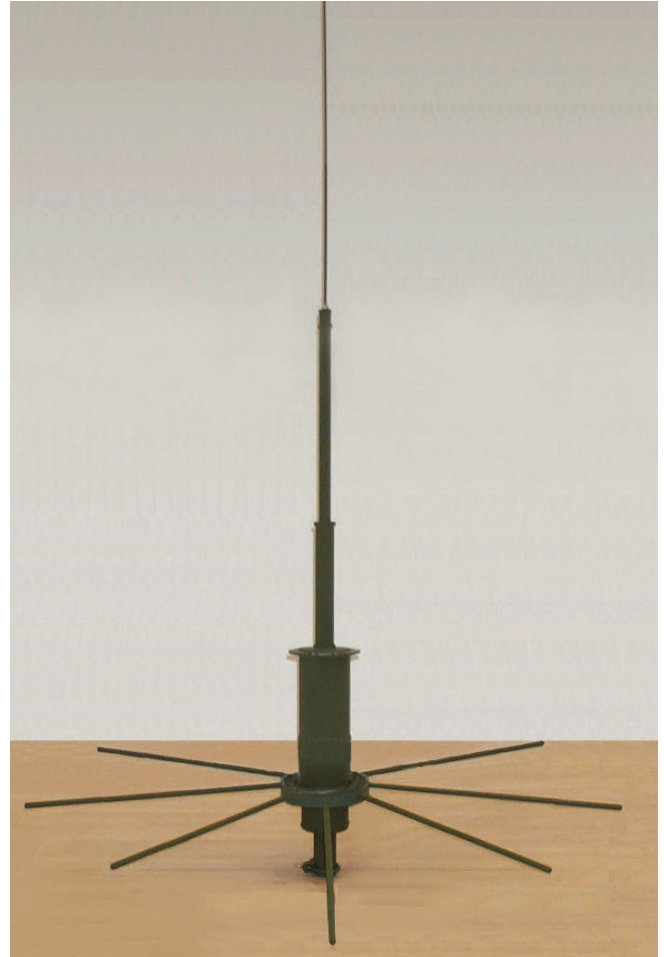
By the use of separate Chelton duplexers and/or multiplexers, it is possible to have simultaneous operation of more than one radio operating in VHF and UHF frequencies.

The **GD2135** is configured as a broad band sleeved monopole. A coaxial choke is incorporated to suppress UHF currents from the upper part of the structure thereby preserving performance over this band. The matching circuitry is fitted within the base of the antenna. The entire assembly uses eight detachable radials as a counterpoise.

The antenna is constructed predominantly from aluminium alloy with a GRP insulating section and protective sleeve. It is configured as a tube which, together with its associated detachable stainless steel whip, is mounted concentrically within the outer UHF radiator.

Eight aluminium alloy radials are screwed into the base housing.

The underside of the base housing is equipped with a clamp for fitting onto a 1.75 inch (44.45 mm) diameter mast-head or spigot.



V/UHF Ground Antenna

ELECTRICAL

Frequency	30 MHz - 88 MHz 108 MHz - 174 MHz 225 MHz - 400 MHz	
Gain	≥-8 dBi *	30 MHz - 88 MHz
	≥-5 dBi *	108 MHz - 174 MHz
	≥ 0 dBi *	225 MHz - 400 MHz
	* average azimuthal	
Polarisation	Vertical when mounted vertically	
Impedance	50 ohm nominal	
VSWR	≤ 2.5:1	30 MHz - 88 MHz
	≤ 5.0:1	108 MHz - 118 MHz
	≤ 2.5:1	118 MHz - 174 MHz
	≤ 2.0:1	225 MHz - 400 MHz
Connectors	N Type Female	

MECHANICAL

Dimensions (deployed)	1.93 m max
Diameter	1.93 m max
Weight	6.81 kg max
Mounting Configuration	To fit onto 1.75 inch (44.45 mm) diameter mast-head

ENVIRONMENTAL

High Temperature	MIL-STD-810C, Method 501.1
Low Temperature	MIL-STD-810C, Method 502.1
Humidity	MIL-STD-810C, Method 507.1
Rain	MIL-STD-810C, Method 506.1
Dust (Fine Sand)	MIL-STD-810C, Method 510.1
Salt Fog	MIL-STD-810C, Method 509.1
Immersion	MIL-STD-810C, Method 512.1

