### **ANTENNA SYSTEMS**

#### www.cbgsystems.com

# SL3-17

## HF NEAR VERTICAL INCIDENCE SKYWAVE (NVIS) COMPACT ANTENNA SYSTEM

Designed to provide high performance close in HF communications for local area communications where the sky wave is not generally available due to the phenomenon of the skip zone.

The type SL3-17 system requires only low RF transmit power for full range with further reduction in power giving a localised communication zone for local fleet communications. It exhibits high angle radiation to permit communications in the 0 to 1200 km range. Tuning over the 3 to 17 MHz frequency range via the optional antenna tuning system.

Tuning data is written to the non volatile memories allowing fast recall when making band changes making it suitable for some ALE data systems.

High performance is assured, even in environments subject to noise interference, due to the inherent filter qualities of the design, which combines automatic frequency tuning, a narrow bandwith and excellent high angle radiation.

The system is of robust construction utilising heavy duty marine grade aluminium tubing to give a large low loss surface area for maximum radiating efficiency, and is fully marinised. Exterior metal surfaces are finished with high durability epoxy based coating, highly resistant to chemical attack, abrasion and the effects of ozone and ultra-violet radiation.



### SPECIFICATIONS **V**

	STANDARD	OPTIONAL
Colour	APO Grey	Other colours to order
Frequency Range	3-17 MHz for NVIS; 2-30MHz overall HF	
Antenna Dimensions	1m high x 2m wide	
Base Plate Dimensions	2000 x 400 mm footprint	
VSWR	< 2:1	
Polarisation	Predominately Horizontal	
Radiation Pattern	Hemispherical	
Impedance	50 ohms nominal	
Power Capability	Dependent upon ATU capability - optional 80W CW/200W PEP or 200W CW/500W PEP available; antenna capable of up to 1kW CW	
DC Requirement	12 volt (optional 24volt) @ 900mA	
Tuning Time	Initial < 2 seconds Recurrent < 10 milliseconds	
Weight	Antenna only: 40kg Packed: 75kg	
Packed Size	Crate: 208cm x 110cm x 46cm	
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### CONTACT DETAILS **V**

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Moonraker products represent the pinnacle of antenna design. With over 45 years' experience supplying Defence, Commercial and Recreational industries. Moonraker antennas are individually tuned and manufactured to our stringent extreme marine quality standards that ensure maximum performance and service life.

