The 3028-900 HF Antenna System is a lightweight, quick to erect, NVIS (Near Vertical Incident Skywave) antenna system that can be deployed as a stand-alone or vehicle mounted system.

Packed in a small canvas carrying bag, the 3028-900 antenna system can be rapidly erected to provide an HF tactical antenna solution for troublesome communication ranges.

The system produces high angle radiation that is suited to short range ionospheric propagation (for example, over mountain ranges).

Operating up to a maximum of 1 kW, the antenna is suitable for use across the 2.5 MHz to 30 MHz band when used in conjunction with an HF antenna tuner. NVIS propagation is normally dependent on local and seasonal ionospheric conditions below 12 MHz.

The antenna system is supplied with a seven-section support pole to which four radial elements are attached. The impedance presented at the base of the system is similar to that obtained from a conventional HF whip that is impedance matched using an HF antenna tuner.

The system is supported using the combination of the upper radiating elements and adjustable insulated ropes attached to light duty ground anchors.

### Electrical Specification
- **Frequency**: 2.5 MHz - 30 MHz
- **Polarisation**: Mainly horizontal for high angle radiation
- **Power Rating**: 1 kW PEP (maximum)
- **Impedance**: Details available on request
- **VSWR**: Dependent on tuner characteristics
- **Radiation Pattern**: Omni-directional in azimuth, Near vertical incidence in elevation
- **Connector**: Special adaptor to 3/8 -16 imperial thread

### Mechanical Specification
- **Deployed Dimensions**
  - Height: 4.6 m above base
  - Width: 26 m (typical)
- **Packed Dimensions**: 725 mm x 230 mm x 120 mm
- **Weight of Kit**: 5.5 kg (maximum)
- **Mounting**: Ground or vehicle mounting hardware available on request

### Environmental Specification
- **Temperature**
  - Operational: -40 °C to +55 °C
  - Storage: +55 °C to +85 °C
- **Humidity**: Up to 95% RH up to 55 °C
- **Wind**: Subject to mounting arrangement
- **Erection Time**: Less than 5 minutes by 2 persons

### Equipment List

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<td>3028-001-01</td>
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<tr>
<td>Base Adaptor Assembly</td>
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<td>3028-002-01</td>
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<td>Mast Tube Assembly</td>
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<td>3028-003-03</td>
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<td>Element Assembly (short)</td>
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<td>Ground Anchor (12 inch)</td>
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<td>Bag</td>
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