

## 1 Metre Folding Whip (Beryllium Copper) and 5W Antenna Matching Unit (AMU) 30-108MHz

Type 3022

Racal Antennas Limited has many years of experience in design, development and manufacture of manpack/portable antennas for the military user. They have been developed after consultation with military users and radio manufacturers worldwide.

The 3020 series 1.0 metre whip antenna has been designed for manpack radio applications, with suitable radio antenna tuner unit, operating in the VHF (30-108MHz) frequency band. The whip sections are manufactured from beryllium copper tube sections which are particularly suited to applications demanding high corrosion resistance. Each tube section is joined together by shock cord or elastic bungee with a combination of springs and ferrules. When the bottom section is held in the hand and the remaining sections are dropped the antenna will simply snap together ready for use.

The folding whip antenna is used in conjunction with a flexible assembly (commonly known as a gooseneck) and antenna matching unit (AMU). The radio interface end of the AMU can be tailored to the radio manufacturers' bulkhead interface. Racal Antennas has the experience and understands the importance of how to integrate antenna matching units (AMU's) as an integral part of the folding whip, optimised to the operating frequency band.



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|-------------------------------------|---|
| <b>Electrical Specification</b>     |   |
| <b>Frequency Range</b>              | 30-108MHz   |
| <b>Polarisation</b>                 | Vertical  |
| <b>Horizontal Radiation Pattern</b> | Omnidirectional                                   |
| <b>Power Rating</b>                 | 5W  |
| <b>Impedance</b>                    | 50Ω   |
| <b>VSWR</b>                         |   |
| <b>Radio Interface</b>              | TNC female  |
| <b>Mechanical Specification</b>     |   |
| <b>Height (Extended)</b>            | 1.0m  |
| <b>Height (Collapsed)</b>           | 0.23m   |
| <b>Weight</b>                       | 0.5kg   |
| <b>Mounting Configuration</b>       | Directly to radio bulkhead connector/ interface   |
| <b>Environmental Specification</b>  |   |
| <b>Temperature</b>                  | Operational -40°C to +70°C Storage -55°C to +85°C |
| <b>Humidity</b>                     | Up to 95% RH up to 55°C                           |

### RACAL ANTENNAS LTD

First Avenue, Millbrook Trading Estate, Southampton, SO15 0LJ, United Kingdom  
 tel: +44 (0) 2380 705705 • fax: +44 (0) 2380 701122 • sales@racalantennas.com • www.racalantennas.com  
 Racal reserve the right to vary in detail from the description and specification in this publication.