



# Antennas

## **SCG22** Mobile Radio



### SCG22 Antenna Options

Original Instructions: ENGLISH  
Document Number: CON-REP-00226  
Issue: 4

**Copyright**

© Sepura Limited. 2002– 2023 All rights reserved.

**No part of the information contained herein and the other referred documents may be copied, distributed or transmitted by any means to any other party without prior written permission of Sepura Limited. The distribution of this document may require a Non-Disclosure Agreement (NDA) between Sepura Limited. and their agents or customers. This document, the referred documents and the described product are considered protected by copyright according to the applicable laws.**

**Disclaimer**

Although every reasonable effort has been made to ensure the accuracy of the information contained herein and any other referred document, this should not be construed as a commitment on the part of Sepura Limited. and the liability of Sepura Limited. for any errors and omissions shall be limited to the correction of such errors and omissions. Sepura Limited. welcomes any comment and feedback as a way to improve any delivered documentation. The information contained herein has been prepared for the use of appropriately trained personnel, and it is intended for the purpose of the agreement under which the information is submitted. Any party using or relying upon this information assumes full responsibility for such use and in no event shall Sepura Limited. be liable to anyone for especial, collateral, incidental, or consequential damages in connection with or arising out of the use of this information. The information or statements given in these documents regarding the suitability, capacity or performance of the mentioned hardware or software products cannot be considered binding but shall be defined in the agreement made between Sepura Limited. and the customer.

**Trademarks**

The Sepura logo and some product branding logos and names are registered trademarks of Sepura Limited. All other trademarks appearing in this document are the property of their respective owners.

**Contact Details**

Sepura Limited.  
9000 Cambridge Research Park  
Beach Drive, Waterbeach  
Cambridge, CB25 9TL  
United Kingdom

[www.sepura.com](http://www.sepura.com)

# Contents

|                              |   |
|------------------------------|---|
| 1. Introduction .....        | 4 |
| 1.1. Scope .....             | 4 |
| 2. Antenna Options .....     | 5 |
| 2.1. TETRA Antennas .....    | 5 |
| 2.2. GPS Antennas .....      | 6 |
| 2.3. Bluetooth Antennas..... | 6 |
| 2.4. Wi-Fi Antennas .....    | 6 |
| 3. Document History .....    | 7 |

# Figures

No table of figures entries found.

# 1. Introduction

This document documents the antenna options available for use with the SCG22 mobile radio.

The SCG22 is not provided with any antennas. It has the following connections available for antenna connections:

BNC – TETRA Antenna

SMA – Bluetooth / Wi-Fi Antenna

SMC – GPS Antenna

Sepura offer a range of antennas suitable for use with the SCG22 that can be provided by Sepura, this document details the available antennas.

## 1.1. Scope

This document covers the following SCG22 radio(s):

SCG2221

SCG2229

## 2. Antenna Options

### 2.1. TETRA Antennas

The following TETRA antennas are available for use with the SCG2229:

| Model     | Frequency Range | Description                                    | Gain (dBi) |
|-----------|-----------------|--|------------|
| 310-00006 | 380-430 MHz     | 1/4 wave M8 Standard Mount, 5m cable           | 2          |
| 310-00007 | 380-410 MHz     | 5/8 wave                                       | 7          |
| 360-00001 | 380-430 MHz     | Flexi-whip/GPS vehicle antenna, 5m cable       | 2          |
| 390-00005 | 380-430 MHz     | Flexi-whip vehicle antenna, 5m lead,           | 2          |
| 390-00006 | 380-430 MHz     | Flexi-whip mag-mount vehicle antenna, 5m cable | 2          |
| 320-00008 | 400-430 MHz     | 5/8 wave M8 Standard Mount, 5m cable           | 7          |
| 330-00009 | 430-472 MHz     | 1/4 wave M8 Standard Mount, 5m cable           | 2          |
| 330-00010 | 430-472 MHz     | 5/8 wave M8 Standard Mount, 5m cable           | 7          |

The following TETRA antennas are available for use with the SCG2221:

| Model     | Frequency Range | Description | Gain (dBi) |
|-----------|-----------------|-------------|------------|
| AFQNT-H4A | 138-155 MHz     | VHF whip    | 2          |
| AFQNT-H5  | 149-159 MHz     | VHF whip    | 2          |
| AFQNT-H6A | 155-174 MHz     | VHF whip    | 2          |
| AFQNT-H7  | 162-174 MHz     | VHF whip    | 2          |

## 2.2. GPS Antennas

The following GPS antenna is available for use with the SCG2229:

| Model            | Frequency Range | Description   | Gain                                |
|------------------|-----------------|---|-------------------------------------|
| <b>360-00001</b> | 1562-1612 MHz   | Flexi-whip/Dual GPS & TETRA 380-430 MHz vehicle antenna, 5m cable | 26 dB<br>LNA (GPS)<br>2 dBi (TETRA) |

The following GPS antennas are available for use with both SCG2229 and SCG2221:

| Model            | Frequency Range | Description                           | Gain  |
|------------------|-----------------|---------------------------------------|-------|
| <b>300-00063</b> | 1575 MHz        | mag mount, 6m cable, SMC connector    | 26 dB |
| <b>300-00393</b> | 1575 MHz        | bolt mount, 30cm cable, SMC connector | 26 dB |

## 2.3. Bluetooth Antennas

Sepura does not currently sell Bluetooth antennas to be used with the SCG22, but customers can purchase suitable antennas elsewhere on the market.

To comply with MPE requirements, the maximum recommended gain for a Bluetooth antenna is 1 dBi.

## 2.4. Wi-Fi Antennas

Sepura does not currently sell Wi-Fi antennas to be used with the SCG22, but customers can purchase suitable antennas elsewhere on the market.

To comply with MPE requirements, the maximum recommended gain for a Wi-Fi antenna is 1 dBi.

### 3. Document History

| Issue | Description  |
|-------|--|
| 1     | Initial release  |
| 2     | More than one issue 2 was in circulation. One had VHF antennas added. One had a reduction in BT/WLAN gain. One had partly removed the connector types. |
| 3     | Tidied up the different issue 2 versions   |
| 4     | Updated the description of 360-00001 to include the TETRA frequency range and gain. Clarified the wording in sections 2.3 and 2.4.                     |

**Contact Details**

Sepura Limited.  
9000 Cambridge Research Park  
Beach Drive, Waterbeach  
Cambridge, CB25 9TL  
United Kingdom

[www.sepura.com](http://www.sepura.com)

© Copyright Sepura Limited. All rights reserved.