

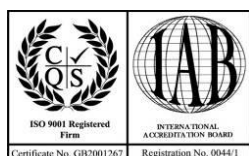
## UHF RFID antenna details



Technology Solutions UK Ltd Suite C  
Loughborough Technology Centre  
Epinal Way  
Loughborough  
Leicestershire  
LE11 3GE  
UNITED KINGDOM

Tel: +44 (0) 1509 238248  
Fax: +44 (0) 1509 220020

Email: [enquiries@tsl.uk.com](mailto:enquiries@tsl.uk.com)



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## History

| Version | Date                                | Modifications  | Approved By | Date | Sign |
|---------|-------------------------------------|----------------|-------------|------|------|
| 1.0     | 13 <sup>th</sup><br>January<br>2011 | First version. | DAC         |      |      |

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## 1. Specifications

|                            | 40×40mm antenna                                          | 79×79mm antenna                                          |
|----------------------------|----------------------------------------------------------|----------------------------------------------------------|
| <b>Operating Frequency</b> | 902MHz to 928MHz                                         | 902MHz to 928MHz                                         |
| <b>Return loss</b>         | 15dB or greater                                          | 15dB or greater                                          |
| <b>Impedance</b>           | 50Ω                                                      | 50Ω                                                      |
| <b>Dimensions</b>          | 40mm×40mm×10mm                                           | 79mm×79mm×8mm                                            |
| <b>Polarisation</b>        | Right hand circularly polarised                          | Right hand circularly polarised                          |
| <b>Gain</b>                | Maximum 0.5dBiC                                          | Maximum 2.5dBiC                                          |
| <b>Beamwidth</b>           | >130°                                                    | >130°                                                    |
| <b>Axial ratio</b>         | <2.0                                                     | <2.0                                                     |
| <b>Connection</b>          | U.FL connector on 80mm of 1.32mm diameter coaxial cable. | U.FL connector on 80mm of 1.32mm diameter coaxial cable. |

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## 2. Photographs

### 2.1. 40mm × 40mm antenna



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## 2.2. 79×79mm antenna



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#### + About TSL

TSL designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals. Embedded technologies include:

- GPS
- RFID – Low Frequency, High Frequency and UHF
- GPRS/GSM
- IrDA
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- Bluetooth
- 802.11 WiFi
- Magnetic Card Readers
- OCR – B and ePassport

Utilizing class leading Industrial design, TSL develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

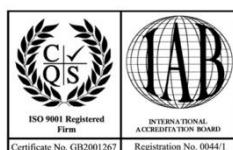
Telephone: +44 (0)1509 238248

Fax: +44 (0)1509 220020

#### Postal Address:

Technology Solutions (UK) Limited,  
Suite C, Loughborough Technology Centre,  
Epinal Way,  
Loughborough,  
Leicestershire,  
LE11 3GE.  
United Kingdom.

Email: [enquiries@tsl.uk.com](mailto:enquiries@tsl.uk.com)



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