

# HCRING



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**TALLYSMAN**<sup>®</sup>  
A CALIAN COMPANY

## Helical Mounting Ring

### Overview

Tallysman has developed a mounting ring to enable the secure installation of its embedded helical line of antennas. The mounting ring traps the outer edge of the antenna circuit board to the host circuit board or any flat surface. Both the antenna circuit board and the host circuit board (manufactured by the customer) have a slot that matches the helical mounting ring's key. This structure secures the antenna in a consistent orientation and prevents it from turning.

The Tallysman helical mounting ring can be installed in two ways. It can trap the antenna circuit board to the top or the bottom of the host circuit board or any flat mounting surface.

Tallysman's line of embedded helical antennas has two different form factors. The first has a 2cm diameter antenna element and uses the HCRING 20 mm model (P/N 23-0219-0). Antennas in this group include:

HC600E (Iridium);  
HC771E (L1/G1/E1/B1);  
HC871E (L1/G1/E1/B1 and L2/G2).

The second form factor has a 3 cm diameter antenna element and uses the HCRING 30 mm model (P/N 23-0220-0). Antennas in this group include:

HC872E (L1/G1/E1/B1, L2/G2, and L-band corrections);  
HC882E (L1/G1/E1/B1, L2/G2/G3/E5b/B2, and L-band corrections);  
HC976E (L1/G1/E1/B1, L6/E6/L2/G2/B3, and L-band corrections);  
HC977E (L1/G1/E1/B1, L2/G2/G3/E5ab/B2/B2a, and L-band corrections).

Tallysman also provides engineering support for the installation and integration of embedded helical antennas to enable the integrator to achieve a successful installation and obtain optimum antenna performance.



### Features

- Secure mounting with 4-screw attachment
- A key and slot structure that aligns the mounting ring, antenna, and host board
- Ensures that the antenna is always installed with the same orientation
- Light weight and durable

### Benefits

- Extremely lightweight (2.0 g or 2.5 g)
- Robust, secure, and repeatable installation
- Two mounting options (top or bottom of host circuit board)



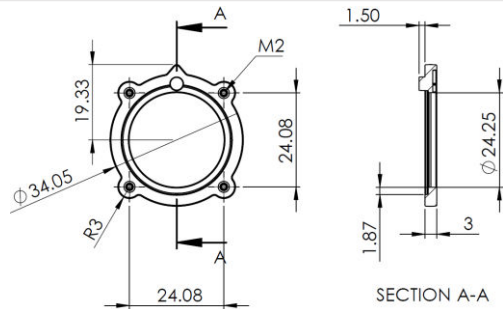
Contact NavtechGPS for product details. [www.NavtechGPS.com](http://www.NavtechGPS.com)  
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# Helical Mounting Ring

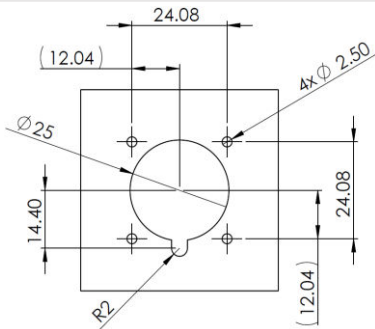
## Mechanicals

Parameter	23-0219-0	23-0220-0
Inner diameter	24.08 mm	32.00 mm
Outer diameter	34.05 mm	45.23 mm
Height	3.00 mm	3.00 mm
Trapping edge	1.87 mm	2.03 mm
Weight	2.00 g	2.50 g
Maximum torque per M2 screw	0.25 Nm	0.25 Nm

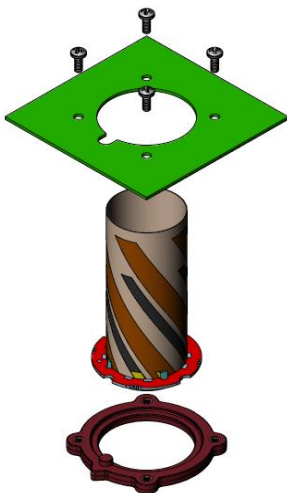
## 23-0219-0 - Mechanical Diagram



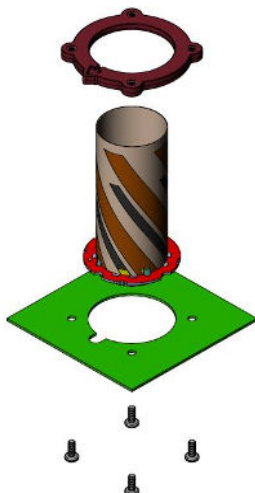
## 23-0219-0 - Host Circuit Board Cut-out



## 23-0219-0 - Bottom Mount



## 23-0219-0 - Top Mount



## Ordering Information

### Part Number

23-0219-0 for 20 mm | 23-0220-0 for 30 mm

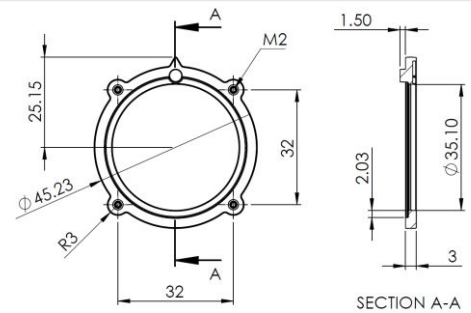
Please refer to our [Ordering Guide](https://www.tallysman.com/resource/tallysman-ordering-guide/) to review available radomes and connectors at: <https://www.tallysman.com/resource/tallysman-ordering-guide/>

## Warranty

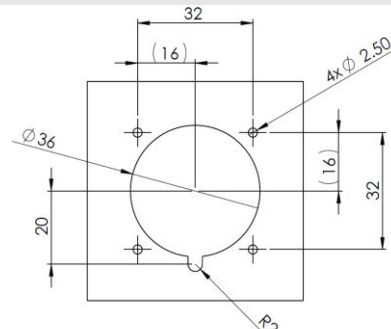
Parts and Labour

1-year standard warranty

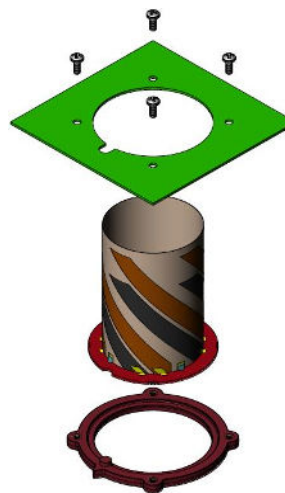
## 23-0220-0 - Mechanical Diagram



## 23-0220-0 - Host Circuit Board Cut-out



## 23-0220-0 - Bottom Mount



## 23-0220-0 - Top Mount

