

# Lightweight Antennas



For many UAV applications the combined weight of system components is a crucial consideration. Tallysman offers a wide range of GNSS antennas especially designed to provide very high performance with an absolute minimum of weight. The range includes antennas that feature helical, single and composite patch elements and include both the smallest and lightest dual band patch antennas in the World.



**TW8000 Series  
Housed Patch  
Antenna**



**Dual Band OEM  
Patch Antenna**



**Housed Helical  
Antenna**

Tallysman patch element antennas feature our Accutenna<sup>®</sup> technology, which, by virtue of dual feed patch elements, provide a substantially more pure right hand circularly polarized response over the full antenna bandwidth. This is true, even for the smallest of our (patented) antenna products.

Accutenna<sup>®</sup> products provide enhanced rejection of cross polarized signals, which commonly results from signal reflections (multipath, such as from buildings), which otherwise would have the effect of “blurring” the received signals.

Our antennas also support dual and triple band Real Time Kinematics (RTK) systems with wider bandwidths and tight Phase Centre Variations (PCVs).

Tallysman is now introducing a wide range of high performance helical antennas with robust housings. The single, dual, and triple band GNSS versions of these products feature low loss prefilters for protection against high level interfering signals, such as LTE and other communications systems. In addition, passive bidirectional Iridium antennas for satellite communications are also available.

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## Patch Antennas

Ceramic patch based antennas are available in both housed and OEM (embedded) versions. Tallysman offers custom tuning services for the OEM antennas to ensure the optimal performance of the antenna in your housing.



## Helical Antennas

Tallysman offers a wide range of high performance helical antennas with robust housings that provide protection against damage during installation. OEM (embedded) versions are also available.



## “Button” Antenna (coming soon)

In Q3 2019 Tallysman will introduce a small lightweight housing designed specifically to minimize the required footprint of real-estate challenged surfaces. The antenna connection is via a through-hole directly beneath the housing. This family will include upper and dual band GNSS antennas and will be ideal for mounting on backpacks, helmets and similar tight spots.

Product	Frequencies	L-Band	Type	Weight
TW1721/TW1722	L1, G1, E1, B1		OEM patch	18 g
HC771	L1, G1, E1, B1		Helical	25g
TW4721/TW4722	L1, G1, E1, B1		Housed Patch	50 g
TW9712	L1, G1, E1, B1		Bottom Connector	
TW8825	L1/L5, G1, E1/E5a, B1		Housed patch	52 g
TW1825	L1/L5, G1, E1/E5a, B1		OEM patch	37 g
TW9825	L1/L5, G1, E1/E5a, B1		Bottom connector	
TW8829	L1/L2, G1/G2, E1, B1		Housed patch	52 g
TW3867	L1/L2, G1/G2, E1, B1		OEM patch	70 g
TW3872E	L1/L2, G1/G2, E1, B1	x	OEM patch	75 g
TW1829	L1/L2, G1/G2, E1, B1		OEM patch	37 g
TW9829	L1/L2, G1/G2, E1, B1		Bottom connector	
HC871	L1/L2, G1/G2, E1, B1		Helical	25 g
HC872	L1/L2, G1/G2, E1, B1	x	Helical	37 g
TW8889	L1/L2, G1/G2/G3, E1/E5b, B1/B2		Housed patch	52 g
TW1889	L1/L2, G1/G2/G3, E1/E5b, B1/B2		OEM patch	37 g
TW9889	L1/L2, G1/G2/G3, E1/E5b, B1/B2		Bottom connector	
HC882	L1/L2, G1/G2/G3, E1/E5b, B1/B2	x	Helical	34 g
HC975	L1/L2/L5, G1/G2/G3, E1/E5, B1/B2	x	Helical	34 g
TW3967	L1/L2/L5, G1/G2/G3, E1/E5, B1/B2	x	OEM patch	70 g
HC600	Iridium		Helical	18 g
TW2600	Iridium		Housed Patch	100 g

**About Tallysman:** With global headquarters and manufacturing in Ottawa, Canada, Tallysman is a leading manufacturer of high-precision antennas and components for Global Navigation Satellite System (GNSS) applications. Tallysman’s mission is to support the needs of a new generation of positioning systems by delivering unprecedented antenna precision at competitive prices. Learn more at [www.tallysman.com](http://www.tallysman.com)

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