

# Reliable Connectivity

## When it's needed most

# BlackOut

## Helical Counter Drone Antennas

**SINGLE DUAL TRI BAND**

900 MHz / GPS / 2.4 GHz / 5.8 GHz



**HANDHELD**



**VEHICULAR**



**UNMANNED**

Experience the advantages of integrating TACO's BlackOut series of circularly polarized (CP) helical antennas into your C-UAS

*Maximum signal loss of only 3dB at any orientation*

*Consistently and substantially stronger connection*

*Ensures greater control of the target UAS*

Modern security demands reliable tools to protect people, places and possessions. TACO Antenna is a leading manufacturer of innovative, engineered antenna products for a wide array of uses. Our industry leading BlackOut counter drone series has been specifically developed to power compact C-UAS devices.

**TACO**<sup>TM</sup>  
ANTENNA

SINGLE BAND CIRCULAR POLARIZED

TACO's single frequency circular polarized helical antennas are enclosed with an impact resistant polycarbonate radome for protection from the environment. Our antennas are especially suited to harsh environments that have severe reflections. The reflected signal of our circularly polarized helical simply reverses polarization, resulting in less interference and superior multipath rejection than with conventional linearly polarized antennas. No matter your environment, TACO helicals offer reliability and consistency, even under the most difficult conditions.

ELECTRICAL SPECIFICATIONS 690-1000 MHz 900 MHz

MODEL	H-900-12-NF
GAIN - dBic	12.0
VSWR	2:1
POL.	RHCP
HPBW - °	43
POWER - W	100
CONNECTOR	N F



**Rugged Construction**

Polycarbonate radome and sealing gasket ensure water and dust ingress protection

**Reliable Coverage**

Broad coverage from 690 MHz to 1 GHz with less interference than linear signal for cleaner line of sight

MECHANICAL SPECIFICATIONS

LENGTH - in (cm)	18.6 (47.2)
GRD PLANE DIA - in (cm)	12.0 (30.5)
WEIGHT - lbs (kg)	4.3 (2.0)
COLOR	Flat Black
MOUNT	N/A

GPS L1 (1575) & L2 (1227.6) MHz ELECTRICAL SPECIFICATIONS

Our **BlackOut H-L1L2-13-NF**

delivers counter drone coverage to the L1 and L2 GPS frequencies, with a high-power output to create maximum energy transmission.



MODEL	H-L1L2-13-NF
GAIN - dBic	13.0
VSWR	2:1
POL.	RHCP
HPBW - °	41
POWER - W	100
CONNECTOR	N Female

MECHANICAL SPECIFICATIONS

LENGTH - in (cm)	18.1 (46.0)
GRD PLANE DIA - in (cm)	6.0 (15.2)
WEIGHT - lbs (kg)	1.9 (0.9)
COLOR	Flat Black
MOUNT	4 studs

ELECTRICAL SPECIFICATIONS 4900-6000 MHz 5.8 GHz

MODEL	H5812	H5815	H5818
GAIN - dBic	12	15	18
HPBW - °	47-54	34-39	20-24
VSWR		2:1	
POL.		RHCP	
POWER - W		100	
CONNECTOR		N F or SMAF	

MECHANICAL SPECIFICATIONS

LENGTH - in (cm)	4.0 (10.2)	7.5 (19.1)	18.1 (46.0)
GRD PLANE DIA - in (cm)		2.0 (5.1)	
WEIGHT - lbs (kg)	0.3 (0.14)	0.4 (0.17)	0.6 (0.25)
COLOR		Flat Black	
MOUNT		3 studs	



TACO **BlackOut** H5800 Series

- RHCP counter UAS antennas suitable for challenging environments.
- Can be integrated into portable handheld systems, semi-permanent field mast and fixed installations.
- Engineered to deliver wide band performance in the 4.9 to 6.0 GHz range with gain from 12 to 18 dBic.

❖ **ADDITIONAL APPLICATIONS**

*Mining, public safety, elevator & ventilation shafts, video surveillance, warehousing, tunnels, downtown corridors, parking lots, Wi-Fi Mesh, WiMax, ISM, VOiP, RFID, Point-to-Point, wireless security cameras.*

## DUAL BAND CIRCULAR POLARIZED

TACO **BlackOut** DH models use our patented dual helical configuration. Suitable for challenging environments, **BlackOut** Counter UAS antennas can be integrated into larger portable systems, and semi-permanent and fixed field installations.

900 MHz/2.4 GHz

690-1000 MHz / 2400-2550 MHz

ELECTRICAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS

The TACO **BlackOut** DH0911-2412-NF is a circular polarized dual helical antenna engineered to deliver wideband performance in the 690 MHz to 1.0 GHz, and 2.4 to 2.5 GHz range for counter drone applications.



MODEL	DH0911-2412-NF			
FREQUENCY - GHz	900	2.4	LENGTH - in (cm)	16.1 (40.9)
GAIN - dBic	11	12	GRD PLANE DIA - in (cm)	12.0 (30.5)
VSWR	2:1		WEIGHT - lbs (kg)	4.3 (2.0)
POL.	LHCP	RHCP	COLOR	Flat Black
HPBW - °	47	32	MOUNT	N/A
POWER - W	100			
ISOLATION - dB (min)	-15			

ELECTRICAL SPECIFICATIONS

2400-2550 MHz / 5700-58500 MHz

2.4/5.8 GHz

MODEL	DH2412-5813		DH2413-5814		DH2415-5815	
FREQUENCY - GHz	2.4	5.8	2.4	5.8	2.4	5.8
GAIN - dBic	12	13	13	14	15	15
VSWR	2:1		2:1		2:1	
POLARIZATION	RHCP	LHCP	RHCP	LHCP	RHCP	LHCP
HPBW - °	43	31	43	31	28	19
POWER - W	100		100		100	
CONNECTOR	SMAF		SMAF		SMAF	

MECHANICAL SPECIFICATIONS

LENGTH - in (cm)	8.0 (20.3)	8.0 (20.3)	16.0 (40.6)
GRD PLANE DIA - in (cm)	3.0 (7.6)	4.5 (11.3)	4.5 (11.3)
WEIGHT - lbs (kg)	0.6 (0.27)	0.7 (0.3)	1.0 (0.45)
COLOR	Flat Blk	Flat Blk	Flat Blk
MOUNT	4 studs	4 studs	4 studs



TACO's three **BlackOut** DH24-58 models use our patented dual helical configuration. Each provides complete coverage in the 2.4 and 5.8 GHz frequencies, but with different gains and dimensions to better suit your specific need.

## TRI BAND CIRCULAR POLARIZED

900 MHz/2.4/5.8 GHz

ELECTRICAL SPECIFICATIONS

TACO's **BlackOut** Tri-band helical antennas

operate in three frequency bands simultaneously. The engineered design ensures a clean signal with low VSWR across their full signal ranges. This exceptional performance makes them ideal for environments previously considered too reflective. With a combination of strength and precision TACO has become one of the industry's most trusted names.



MODEL	TH0911-2412-5813-NF			TH0911-2412-5813-NF-6		
FREQ - GHz	0.69-1.0	2.4-2.5	5.7-5.85	0.76-1.0	2.4-2.5	5.7-5.85
GAIN - dBic	11	12	14	11	12	14
VSWR	2:1			2:1		
POL.	LHCP	RHCP	LHCP	LHCP	RHCP	LHCP
HPBW - °	46	32	12	50	30	12
POWER - W	100			100		

MECHANICAL SPECIFICATIONS

LENGTH - in (cm)	16.1 (46.0)	16.1 (46.0)
WEIGHT - lbs (kg)	4.3 (2.0)	3.3 (1.5)
GRD PLANE DIA - in (cm)	12.0 (30.5)	6.0 (15.2)
COLOR	Flat Black	Flat Black
MOUNT	Panel or Mast	Panel or Mast

### ❖ ADDITIONAL APPLICATIONS

*Mining, public safety, elevator & ventilation shafts, video surveillance, warehousing, tunnels, downtown corridors, parking lots, Wi-Fi Mesh, WiMax, ISM, VOiP, RFID, Point-to-Point, wireless security cameras.*

  
Ground-To-Air  
Dipoles

  
UHF Satcom

  
Shipboard

  
Directional

  
Custom

TACO<sup>TM</sup>  
ANTENNA

Innovative  
antenna  
solutions  
since 1934.

[tacoantenna.com](http://tacoantenna.com)



**US & Global Sales**

Tel: (717) 975 0885  
Toll Free: (866) 975 4433  
Fax: (717) 763 0469  
[sales@tacoantenna.com](mailto:sales@tacoantenna.com)

**Canada Sales**

Tel: (519) 756 7157 ext 254  
Toll Free: (800) 463 1607  
Fax: (519) 756 5056  
[cansales@tacoantenna.com](mailto:cansales@tacoantenna.com)

**Europe Sales**

Tel: (+44) 07538 737796  
Location:  
[Systemware Europe Ltd.](#)  
[jbarton@tacoantenna.com](mailto:jbarton@tacoantenna.com)

**Australia Sales**

Tel: (+61) 2 4966 5211  
Location: [Control Synergy](#)  
[controlsynergysales@controlsynergy.com.au](mailto:controlsynergysales@controlsynergy.com.au)

TACO<sup>TM</sup>  
ANTENNA  
A DIVISION OF WADE ANTENNA

HEAD OFFICE  
29 Sharp Road  
Brantford, ON  
Canada N3T 5L8

A TRUSTED LEADER  
IN ANTENNA INNOVATION  
SINCE 1934