

# MISSION CRITICAL ANTENNA SOLUTIONS



FREIGHT / PASSENGER RAIL  
TRANSIT / BUS  
MILITARY  
TACTICAL / INTEROPERABLE  
COVERT  
PUBLIC SAFETY



## MISSION CRITICAL ANTENNA SOLUTIONS



Communication is a core requirement to connect both people and systems. Our customers rely on high performance wireless technologies. STI-CO® is a leader in the market providing:

- Antenna design optimization for multiple RF co-location challenges
- Extensive field experience trouble shooting and verification
- Systems that adapt to the latest technologies

STI-CO® celebrates over 50 years of custom engineering antenna systems to meet your mission-critical demands. Designed for performance and reliability, our systems will meet your needs for voice, data, and video transmissions. We stand behind our antennas with a five-year warranty.

We proudly serve law enforcement, military, homeland security, heavy freight, passenger rail and transportation agencies. Our technical service team is available to answer your questions.

We hope to serve you soon.

Kyle Swiat  
President / CEO

Certified ISO 9001:2008  
Certiified DBE and WBE



## 1 FREIGHT / PASSENGER RAIL



These rugged antennas are available in a variety of frequencies. They are an excellent solution to vandalism in high-risk areas.

## 2 TRANSIT / BUS



The STI-CO<sup>®</sup> rugged transit line offers a variety of antennas for use in harsh environments where other antennas would break.

## 3 PUBLIC SAFETY



STI-CO<sup>®</sup> designed a series of innovative antennas specifically for police, fire, utility and emergency vehicles, tow trucks, taxis, airport shuttles, etc.

## 4 COVERT



STI-CO<sup>®</sup> Covert Antennas are the choice for thousands of law enforcement agencies involved in critical surveillance and undercover operations.

## 5 TACTICAL / INTEROPERABLE



The high degree of importance for clear communication between emergency responders at local, state and federal levels in a disaster has been proven time and again.



## FREIGHT / PASSENGER RAIL ANTENNA SYSTEMS

### **Rugged Custom Positive Train Control (PTC) Designed Antenna Solutions for Locomotives.**

Our freight and commuter rail antennas and filters are designed for your most challenging roof tops with a single penetration for bundling cable. STI-CO® antennas and filters have a proven history working in the locomotive RF environment optimizing communication efficiency. Our multiband solutions are available in PTC 220 MHz, VHF, UHF, 7-800, GPS and WiFi. STI-CO® can provide the color-coded antenna feed cables for ease of installation and maintenance.

Our experienced engineers offer their expertise by analyzing the RF environment to optimize communication efficiency. We design rugged, long lasting antenna solutions tested to the AREMA and other standards.





## PTC DUAL TRACK ANTENNA SYSTEM

### Customized Antenna Array for Railroads

- Fully integrated, customized multi-antenna diversity system for PTC
- Antenna combinations from VHF to 5.8 GHz and GPS
- Customized for multiple antennas per track
- System includes single or dual antenna bars for full diversity
- Reduces installation time and expense with only one hole in locomotive per track
- Antennas can be individually replaced for future upgrades with very little down time
- Manufactured using highest quality corrosion resistant materials



\*Rail Bar U.S. Patent No. 9,393,321 B2

### OPTIONS INCLUDE:

- Radome to protect antennas from snow pack and strike damage
- Customized color-coded cable harnesses
- Full line of filters in 160, 220, 450 and 7-800 MHz ranges to reduce intermodulation issues



## RUGGED ALUMINUM ANTENNAS

### Heavy Duty Aluminum Design for Trains, Construction Equipment and Tractor Trailers

- Constructed of virtually indestructible heavy-duty aluminum
- Ideal for trains, construction equipment and tractor-trailers
- Now available in 220 MHz band with optional mounting plate
- New design reduces EMF noise and increases bandwidth
- Factory tuned to your exact operating frequency

MODEL NUMBER	HDLP-NB-HF	HDLP-NB-VHF	HDLP-NB-220	HDLP-NB-UHF
FREQUENCY RANGE (MHz)	30-50	150-174	214 - 228	406 - 512
BANDWIDTH (MHz)*	0.5	2.5	14	20
SWR				1.5:1
POWER RATING (watts)				300
MAX. DIMENSIONS (inches)	6h x 3w x 49	4.2h x 2w x 20.75	3.875h x 2.0w x 14.3	2.5h x 2w x 8
MOUNTING HOLES REQUIRED	7	7	7	3
CONNECTOR	N	PL259	N	PL259

\* Specify operating frequency





## LTE BASE STATION ANTENNA

### The Next Generation for Mobile Broadband Networks

- Designed for the new 4G LTE network
- Ensures support of legacy cellular systems
- Broadband 7-800 MHz and PCS single port operation
- Durable UV protected fiberglass radome
- Superior bandwidth and pattern performance

MODEL NUMBERS	OMNI-DB-7-800/PCS	
FREQUENCY RANGE	760 - 870	1850 - 1950
BANDWIDTH (MHz)	110	100
SWR	< 2:1	
POWER RATING (watts)	50	
GAIN (DBi)	2.1	
PATTERN	Omni-directional	
POLARIZATION	Vertical	
MAX. HEIGHT (inches)	19.0	
RADOME MATERIAL	Fiberglass	
MAST MATERIAL	Brass	
CONNECTOR	N female	
TEMP. RANGE (degree F)	-50 to +150	



## WavStreamer™ MIMO ANTENNA

**Cutting-Edge Multiband Antenna optimized for Superior Diversity Performance**

- Robust multiband roof mount 5-in-1 antenna  
GPS, WiFi (2), and 4G LTE Elements (2)
- Environmentally tested and certified (SAEJ1455, AREMA, MIL-STD-810)
- Cables and connector can be customized
- Five year STI-CO warranty
- WavStreamer Applications:  
Freight / Passenger Rail  
Transit / Bus  
Public Safety



SPECIFICATIONS	STI-CO P/N: MRLP-XX-LLG22
Frequency Range Cell 1&2 (MHz)	698-960 MHz 1700-2700 MHz
Frequency Range WiFi 1&2 (MHz)	2400-2500 MHz 4900-5900 MHz
GPS (Active Gain 28dB, 1.5-3.6V supply voltage required)	GPS/Galileo/GLONASS
VSWR (max) 2.25:1	Cell $\leq$ 2.25:1 (698-960 MHz) Cell $\leq$ 2.0:1 (1700-2300 MHz) WiFi $\leq$ 1.75:1 (2400-2500 MHz) WiFi $\leq$ 2.0:1 (4900-5900 MHz)
Impedance (ohms)	50
Connector	SMA-Female, others available
Cable Type	LMR-195-FR (cell 1&2) RG-174 (GPS)
Mounting Type (roof mount)	1" dia. Feed through
Radome Material	Makrolon Polycarbonate - White
Dimensions	Length (in): 9.2" Height (in): 3.6" Width (in): 6"
Operating Temperature Range (°C)	Operating: -40°C to +75°C Storage: -55°C to +85°C



## PRESELECTOR FILTERS

### Provides Optimum Filtering

- Provides optimum filtering for on-board locomotive frequency bands with sharp cutoff and notched response
- Reduces intermodulation issues by blocking unwanted signals
- Specifically designed for railroad PTC systems
- High power capacity and rugged design



MODEL NUMBER	FILT-NB-160-MIL			FILT-NB-220-MIL		
FREQUENCY RANGE (MHz)	160 -163			216 - 222		
BANDWIDTH (MHz)	3			6		
POWER RATING (watts)	150			150		
VSWR	1.25:1 (Typical)	1.5:1 (Max)		1.25:1 (Typical)	1.5:1 (Max)	
INSERTION LOSS (dB)	1.0 (Typical)			1.0 (Typical)		
FREQUENCY (MHz)	45	220	450	45	163	450
ISOLATION (dB)	>60	>60	>60	>60	>70	>50
ISOLATION (dB typical)	>70	>70	>70	>75	>80	>55
FINISH	Clear Alodine			Clear Alodine		
DIMENSIONS (inches)	7.4 L X 2.2 W X 1.2 H			7.4 L X 2.2 W X 1.2 H		
MOUNTING	Standard Bracket			Standard Bracket		
TEMPERATURE RANGE (C)	-40 to +85			-40 to +85		
CONNECTORS	UHF or N-type (Male/Female)			N-type (Male/Female)		

## HIGH PERFORMANCE FILTERS

### Compact Filters Provide Optimum Filtering

- Compact filters provide optimum filtering for on-board locomotive frequency bands and superior channel isolation
- Reduces intermodulation issues by blocking unwanted signals
- Connectors customized to fit your needs



MODEL NUMBER	FILT-NB-VHF-COM	FILT-NB-220-COM	FILT-NB-UHF-COM	FILT-HP-7-800-COM
FREQUENCY RANGE (MHz)	160 -163	216 - 222	450 -460	690 - 2500
REJECT BAND	> 216	<163	< 222, 905-930	<460
BANDWIDTH (MHz)	3	6	10	1810
VSWR			1.5:1	
POWER RATING (watts)	100	100	100	50
SYSTEM IMPEDANCE (Ohms)			50	
INSERTION LOSS (dB)	< 0.5	< 0.5	< 0.5	< 1.0
ISOLATION (dB)	> 75	> 75	> 75	> 70
INCHES			5.2 X 2 X 1.2h	
MOUNTING HARDWARE			Provided	
CONNECTORS (choose 2)			N-male (or -F/M, -M/F or -F versions available)	





## TRANSIT / BUS ANTENNA SYSTEMS

**High-performance weather resistant antenna solutions for commuter bus and rapid transit systems.** STI-CO® has built on a long history of designing high-performance antenna systems for rail and mission critical mobile applications. We custom engineer to your specific requirements that are configured for multiple frequencies in VHF, UHF, Cell3G/4G, GPS and WiFi. STI-CO® designs durable, long lasting antenna solutions. We exceed the industry standard by offering our 5 year warranty.





## DUAL BAND ROOF MOUNT ANTENNAS

For 7-800/PCS, 2.4/5.8 GHz and GPS

- Excellent for rail/transit and law enforcement applications
- Superior pattern coverage for rugged mobile or fixed applications
- Wideband performance and reliability
- Minimum loss – no tuning required

## CAPABILITIES

- 3G/4G
- WiFi
- GPS



MODEL NUMBER	RFMT-DB-7-800/PCS		RFMT-DB-24/58		RFMT-NB-GPS
FREQUENCY RANGE (MHz)	698 - 960	1710 - 2500	2400 - 2500	4900 - 5900	1565.42 - 1585.42
BANDWIDTH (MHz)	262	790	100	1000	20
SWR	2:1				
POWER RATING	100 W		100 W		2.7 - 5.5 V
IMPEDANCE (ohms)	50				
GAIN (dBi)	3.0	4.0	3.0	4.0	3@90°
PATTERN	Omni-directional				
HEIGHT (inches)	3.75		1.8		.083
DIAMETER (inches)	1.5		1.5		2.36
CONNECTOR	NMO		NMO		BNC
MAST MATERIAL	Brass		Brass		Ceramic patch



RFMT-DB-7-800/PCS



RFMT-DB-24/58



RFMT-NB-GPS



## RADOME ANTENNAS

### Tough Yet Attractive for Buses, Rapid Transit and Law Enforcement

- A tough ABS plastic radome protects antenna from destructive elements
- Popular choice for buses, rapid transit, and law enforcement vehicles
- Available in both single and multiple bands under one radome
- Multi-band provides a choice of GPS with voice or data communications



MODEL NUMBER	SRLP-NB-UHF	SRLP-SB-CEL	SRLP-DB-CEL/GPS or SRLP-DB-GPS/2.4		
FREQUENCY RANGE (MHz)	406 - 512	806 - 896	806 - 896	w/ 1575.42	or 2400
BANDWIDTH (MHz)	20*	90	90	2	100
POWER RATING (watts)	100	100	100	100	
ISOLATION (dB)			45	45	
RADOME MATERIAL	White ABS plastic				
MAXIMUM HEIGHT (inches)	2.75				
MAXIMUM WIDTH (inches)	3.5				
MAXIMUM LENGTH (inches)	11.75				
MOUNTING HOLES REQ.	5	5	6		
CONNECTORS	BNC	BNC	BNC	SMA	BNC
GPS CENTER FREQUENCY (MHz)				1575	
DC SUPPLY VOLTAGE				12	
GAIN (dB)				26	

\* Specify operating frequency



## WavStreamer™ MIMO ANTENNA

**Cutting-Edge Multiband Antenna optimized for Superior Diversity Performance**

- Robust multiband roof mount 5-in-1 antenna  
GPS, WiFi (2), and 4G LTE Elements (2)
- Environmentally tested and certified (SAEJ1455, AREMA, MIL-STD-810)
- Cables and connector can be customized
- Five year STI-CO warranty
- WavStreamer Applications:  
Freight / Passenger Rail  
Transit / Bus  
Public Safety



SPECIFICATIONS	STI-CO P/N: MRLP-XX-LLG22
Frequency Range Cell 1&2 (MHz)	698-960 MHz 1700-2700 MHz
Frequency Range WiFi 1&2 (MHz)	2400-2500 MHz 4900-5900 MHz
GPS (Active Gain 28dB, 1.5-3.6V supply voltage required)	GPS/Galileo/GLONASS
VSWR (max) 2.25:1	Cell $\leq$ 2.25:1 (698-960 MHz) Cell $\leq$ 2.0:1 (1700-2300 MHz) WiFi $\leq$ 1.75:1 (2400-2500 MHz) WiFi $\leq$ 2.0:1 (4900-5900 MHz)
Impedance (ohms)	50
Connector	SMA-Female, others available
Cable Type	LMR-195-FR (cell 1&2) RG-174 (GPS)
Mounting Type (roof mount)	1" dia. Feed through
Radome Material	Makrolon Polycarbonate - White
Dimensions	Length (in): 9.2" Height (in): 3.6" Width (in): 6"
Operating Temperature Range (°C)	Operating: -40°C to +75°C Storage: -55°C to +85°C



## PUBLIC SAFETY ANTENNA SYSTEMS

**High quality, rugged antenna systems that can hold up under the daily punishment from low clearances such as parking garages, tree limbs, car washes and more!**

STI-CO® provides a series of innovative solutions designed for law enforcement, emergency management, construction, utility and service vehicles in mind. Our Flexi-Whip with our unbeatable whip material helps to reduce down time costs. Don't lose two-way mobile communications in the field due to broken antennas! Look to STI-CO® for your antenna needs.





## FLEXI-WHIP ANTENNAS

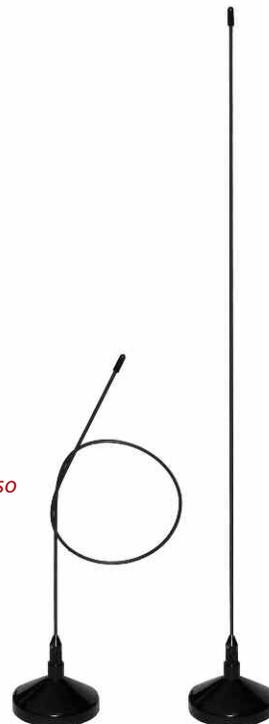
**Guaranteed Not to Break or We'll Replace Them!**

- Bends but won't break - or we'll replace them!
- Reduces vehicle downtime and life cycle costs
- Tunable from 136 MHz to 1 GHz
- Available in NMO roof, magnet, trunk lip and window clip mounts
- Improves hand-held performance
- Retrofit existing mounts now with Flexi-Whip masts

### MODEL NUMBERS:

ROOF-FT-NITI	Roof Mount
MGNT-FT-NITI	Magnet Mount
TKLP-FT-NITI	Trunk Lip Mount
WCLP-FT-NITI	Window Clip Mount

The Flex-Whip Antenna is so **BENDABLE** you can tie it in a knot



<b>FREQUENCY RANGE</b>	<b>136 MHz - 1 GHz</b>		
<b>BANDWIDTH (MHz)</b>	18 MHz @ 136	90 MHz @ 450	150 MHz @ 850
<b>SWR</b>	<2:1		
<b>POWER RATING (watts)</b>	150		
<b>GAIN</b>	Unity		
<b>PATTERN</b>	Omni-directional		
<b>MAXIMUM HEIGHT</b>	23" at 136 MHz		
<b>MAST MATERIAL</b>	Rubber coated Nitinol		
<b>MOUNTING STYLE</b>	Roof NMO, Magnet, Trunk Lip, Window Clip		
<b>FEED LINE</b>	17 ft. RG-58/U		
<b>CONNECTORS (Choose one)</b>	PL259, Mini UHF, BNC, TNC, SMA, N		





## FLEXI-WHIP / GPS ANTENNA

### Unbreakable Flexi-Whip and Rugged GPS In One Low Profile Antenna

- Install one less antenna on your vehicle
- Field tunable for VHF, UHF, 700 or 800 MHz
- GPS housing and die-cast base survive harshest conditions
- Solid brass NMO components give optimal conductivity

MODEL NUMBER	ROOF-DB-NITI/GPS	
FREQUENCY RANGE (MHz)	136 - 1000	& 1570 - 1580
BANDWIDTH (MHz)	18 @ 136 MHz, 90 @ 450 MHz, 150 @ 850 MHz, 10 @ 1570 MHz	
SWR	<2:1	<1.5:1
POWER RATING (watts)	50	
GAIN (dB)	Unity	27
NOISE FIGURE	2.0 max.	
OPERATIONAL VOLTAGE (vdc)	3.0 - 5.5	
PATTERN	Omni-directional	
MAX. HEIGHT	23" @ 136 MHz	
FINISH	Black	
MOUNTING STYLE	Roof mount	
FEED LINE	17' RG58	17' RG174
CONNECTORS (choose two)	PL259, Mini-UHF, BNC, TNC, SMA, N,	



Antenna mast cut for 850 MHz



## DUAL BAND, DUAL PORT ANTENNA

### Combine VHF and 7-800 MHz Bands in One Antenna

- Reduce number of antennas and eliminate extra hole in roof
- Simultaneous two-band operation
- Integrated coupler with two ports for radios
- Fits standard NMO mounts
- **New!** Now available with an unbreakable Flexi-Whip mast

MODEL NUMBER	RFMT-DB-VHF/7-800	RFMT-NT-VHF/7-800	RFMT-NT-UHF/7-800
FREQUENCY RANGE (MHz)	150-174 & 760-870		450-480 & 760-870
BANDWIDTH (MHz)	24	110	30 110
SWR	<2:1		<2:1
POWER RATING (watts)	100	35	50 35
GAIN	Unity		Unity
PATTERN	Omni-directional		Omni-directional
MAST MATERIAL	Stainless Steel	Nitinol	Nitinol
MAX. HEIGHT (inches)	17.6		17.6
MOUNTING STYLE	Roof NMO		Roof NMO

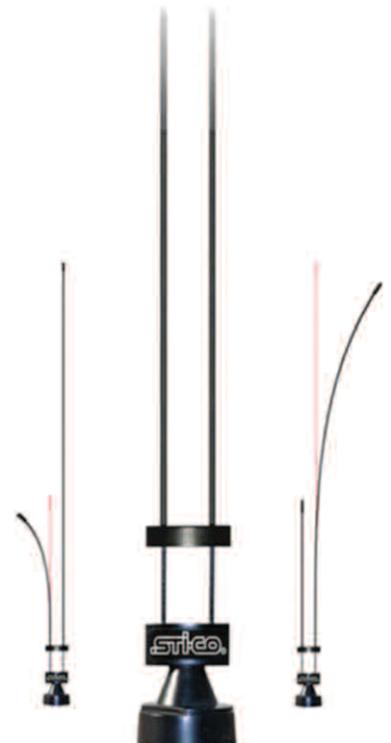


## TRI BAND ROOF MOUNT ANTENNA\*

### Designed for Software Defined Radios

- Single port allows for VHF/UHF/7-800 MHz operation
- Value priced with excellent performance
- Complete system includes mast, base, cable kit and choice of connector
- Also available with mast only - for use with existing NMO base
- **New!** Now available with an unbreakable Flexi-Whip mast

MODEL NUMBERS	RFMT-TB-V/U/C or RFMT-TB-V/U/C-A (mast only)		
FREQUENCY RANGES (MHz)	150-174	380-520	762-870
BANDWIDTH (MHz)	24	140	108
SWR	<3:1		
POWER RATING (Watts)	150		
FINISH	Black		
MAXIMUM HEIGHT (inches)	19.20		
MOUNTING HARDWARE	NMO Base		
MAST MATERIAL	Stainless Steel		
FEED LINE	17' RG58		
CONNECTORS (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N		



\*U.S. Patent No. 8,933,850 B2



## WavStreamer™ MIMO ANTENNA

Cutting-Edge Multiband Antenna optimized for Superior Diversity Performance

- Robust multiband roof mount 5-in-1 antenna  
GPS, WiFi (2), and 4G LTE Elements (2)
- Environmentally tested and certified (SAEJ1455, AREMA, MIL-STD-810)
- Cables and connector can be customized
- Five year STI-CO warranty
- WavStreamer Applications:  
Freight / Passenger Rail  
Transit / Bus  
Public Safety



SPECIFICATIONS	STI-CO P/N: MRLP-XX-LLG22
Frequency Range Cell 1&2 (MHz)	698-960 MHz 1700-2700 MHz
Frequency Range WiFi 1&2 (MHz)	2400-2500 MHz 4900-5900 MHz
GPS (Active Gain 28dB, 1.5-3.6V supply voltage required)	GPS/Galileo/GLONASS
VSWR (max) 2.25:1	Cell ≤ 2.25:1 (698-960 MHz) Cell ≤ 2.0:1 (1700-2300 MHz) WiFi ≤ 1.75:1 (2400-2500 MHz) WiFi ≤ 2.0:1 (4900-5900 MHz)
Impedance (ohms)	50
Connector	SMA-Female, others available
Cable Type	LMR-195-FR (cell 1&2) RG-174 (GPS)
Mounting Type (roof mount)	1" dia. Feed through
Radome Material	Makrolon Polycarbonate - White
Dimensions	Length (in): 9.2" Height (in): 3.6" Width (in): 6"
Operating Temperature Range (°C)	Operating: -40°C to +75°C Storage: -55°C to +85°C



## COVERT ANTENNA SYSTEMS

**Blend into the background with STI-CO® undercover and hidden antenna solutions.**

STI-CO® offers a complete line of custom covert OEM AM/FM exact replacement, concealed and disguised solutions for law enforcement and government agencies. We continually design and create new products to keep up with the automotive cosmetic changes, new two-way radio frequency specifications including dual-band and tri-band options for your surveillance mission critical requirements.

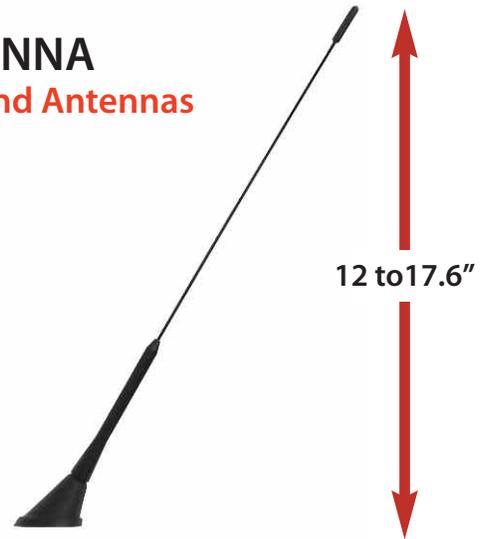




## COVERT EURO STYLE ROOF MOUNT ANTENNA

### Aerodynamic Euro-Style in Narrow Band and Dual Band Antennas

- Unique roof-mount fits domestic and foreign vehicles
- Latest technology with unmatched performance
- Direct replacement - best covert solution
- AM/FM antenna included (may not be compatible with non-domestic vehicles)



MODEL NUMBER	SB-VHF-EA	SB-UHF-EA	**DB-VHF/UHF-EA		DB-VHF/7-800-EA
FREQUENCY RANGE (MHz)	150-174	406-512	150-174 & 406-430		150-174 & 760-870
BANDWIDTH (MHz)	*12-24	106	*12-24	24	*12-24 110
POWER RATING (Watts)	150	125	150	110	150 35
FINISH	Black				
MAXIMUM HEIGHT (inches)	17.5	12	13.5		17.6
MOUNTING HARDWARE	OEM hardware				
MAST MATERIAL	Stainless Steel	Fiberglass	Fiberglass		Aluminum
FEED LINE	17' RG58	17' RG58	17' RG58 (ea)		17' RG58 (ea)
CONNECTORS (one per radio)	PL259, Mini-UHF, BNC, TNC, SMA, N				

**WHEN ORDERING:** Please provide the **Year, Make, Model** and **Trim Line** of your vehicle.

\* Shorter styles may be limited to 12 MHz bandwidth so operating frequency may be required.

\*\* Dual band not available in all models.



# STEALTH ANTENNA

## Magnet Mount...Won't Blow Your Cover

- Low profile, durable and covert
- For SUV's, vans - any vehicle with a lift gate
- Magnet mount, easy to move from one vehicle to another
- Now available in single or dual band combinations of VHF, UHF and 7-800 MHz
- Installs in minutes



MODEL NUMBER	CMAG- SB-VHF	CMAG-SB-UHF	CMAG-DB-VHFH/UHFL		CMAG-DB-VHFH/7-800	
FREQUENCY RANGE (MHz)	150 -174	380 – 512	160-174 & 406-440		160-174 & 760-896	
BANDWIDTH (MHz)	24	132	14	34	14	136
POWER RATING (watts)	150	110	150	110	150	35
FINISH	Black					
MAX. HEIGHT (in.)	9.6					
MOUNTING HOLE (in.)	Magnet Mount					
FEED LINE (17' ea.)	RG174	RG174	RG58		RG58	
CONNECTORS (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N					





## STEALTH ANTENNA

### Permanent Roof Mount

- Sleek Euro-Style permanent mount antenna
- Now available in single or dual band combinations of VHF, UHF and 7-800 MHz
- Stockable - fits most vehicles
- Perfect for covert or non-covert applications
- AM/FM antenna included (may not be compatible with non-domestic vehicles)



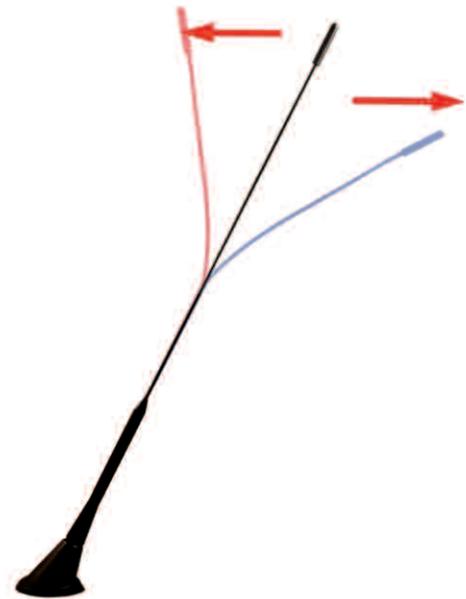
MODEL NUMBER	CPMT- SB-VHF	CPMT-DB-VHF/UHF		CPMT-DB-VHF/7-800	
FREQUENCY RANGE (MHz)	150 -174	150-174 & 406-430		150-174 & 760-870	
BANDWIDTH (MHz)	24	24	30	24	136
POWER RATING (watts)	150	150	125	150	50
FINISH	Black				
MAX. HEIGHT (in.)	11.5				
MOUNTING HOLE (in.)	Roof Mount				
FEED LINE (17'/radio)	Low Loss 195	RG58		RG58	
CONNECTORS (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N				



## EURO-STYLE ANTENNA

### With FLEXIBLE Mast

- Flexible mast bends but won't break
- Survives antenna impact in parking garages
- Select models available in VHF/UHF or VHF/7-800
- AM/FM antenna included (may not be compatible with non-domestic vehicles)



MODEL NUMBER	SB-VHF-EAN	**DB-VHF/UHF-EAN	**DB-VHF/7-800-EAN
FREQUENCY RANGE (MHz)	150 -174	150-174 & 406-512	150-174 & 760-870
BANDWIDTH (MHz)	*12-24	*12-24 >34	*12-24 110
POWER RATING (watts)	150	150 110	150 35
FINISH	Black	Black	Black
MAX. HEIGHT (inches)	15.2	18	15.2
MAST MATERIAL	Nitinol	Nitinol	Nitinol
FEED LINE	17' RG58	17' RG58 (ea)	17' RG58 (ea)
CONNECTORS (one per band)	PL259, Mini-UHF, BNC, TNC, SMA, N		

**WHEN ORDERING:** Please provide the **Year, Make, Model** and **Trim Line** of your vehicle.

\* Shorter styles may be limited to 12 MHz bandwidth so operating frequency may be required.

\*\* Dual band not available in all models.



## PLUG 'N PLAY ANTENNA

### Magnet Mount Works With Your Portable Antenna Whip

- Accepts portable whips with flush female SMA (SF) connector
- Easy install magnet mount suits temporary or permanent needs
- Adapts to your specific frequency applications
- Enhances your portable radio's performance
- Buy base alone or with optional whip



OPTIONAL WHIP	BSSF-VHF-M	BSSF-UHF-M	BSSF-CEL-M
COMPLETE SYSTEM	MMAS-BSSF-VHF	MMAS-BSSF-UHF	MMAS-BSSF-CEL
BASE ONLY	MMAS-BSSF		
FREQ. RANGE (MHz)	150-174	360-520	806-870
SWR	2:1		
POWER RATING (watts)	10		
MAX. HEIGHT (base)	2"		
FINISH	Black		
MOUNTING STYLE	Magnet		
FEED LINE	17' RG316		
CONNECTORS (Choose one)	PL259, Mini-UHF, BNC, TNC, N, SF		

## SUPERBAND® FENDER MOUNT ANTENNA

### Totally Covert Fender Mounts in VHF, UHF and 700 MHz

- Exact replacement for factory broadcast radio antenna
- Specific to the make, model, and year of each car or truck
- Covers entire bandwidth without tuning
- Allows simultaneous operation of the entertainment radio

MODEL NUMBER*	SB-VHF-DS	SB-UHF-DS*	SB-700-DS
FREQUENCY RANGE (MHz)	150 - 174	406 - 512	760 - 820
BANDWIDTH (MHz)	24	60*	60
POWER RATING (watts)	150	150	35
ISOLATION (dB)	35		
FINISH	OEM match		
MAXIMUM HEIGHT (inches)	28	31	34
MOUNTING HARDWARE	OEM hardware		
MAST MATERIAL	Stainless steel		
FEED LINE	17' RG 58		
CONNECTOR (Choose one)	PL259, Mini UHF, BNC, TNC, SMA, N		

**WHEN ORDERING:** Please provide the **Year, Make, Model** and **Trim Line** of your vehicle.

\* Specify UHF operating frequency





## NARROW BAND ANTENNA

High Performance, Narrow Bandwidth

MODEL NUMBERS	NB-HF-DS	NB-VHF	NB-UHF	NB-CEL
FREQUENCY RANGE (MHz)	27- 50	150-174	406-512	760-870
BANDWIDTH (MHz)*	0.6	2.0	20	60
POWER RATING (watts)	150	150	150	35
FINISH	OEM match			
MAXIMUM HEIGHT (inches)	36			
MOUNTING HARDWARE	OEM hardware			
MAST MATERIAL	Stainless steel			
FEED LINE	17' RG58			
CONNECTOR (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N			

## DUAL BAND ANTENNA

Combinations of VHF with Either UHF, 700, or 800 MHz

MODEL NUMBERS	DB-VHF/UHF		DB-VHF/7-800		DB-VHF/CEL	
FREQUENCY RANGE(MHz)	150-174 & 406-512		150-174 & 760-870		150-174 & 760-870	
BANDWIDTH (MHz)	24	34*	10*	110	10*	60
POWER RATING (watts)	150	150	150	35	150	35
FINISH	OEM match					
MAXIMUM HEIGHT (inches)	31		32		32	
MOUNTING HARDWARE	OEM hardware					
MAST MATERIAL	Fiberglass		Stainless steel		Stainless steel	
FEED LINES (17' per radio)	RG58					
CONNECTOR (one per radio)	PL259, Mini-UHF, BNC, TNC, SMA, N					

**WHEN ORDERING:** Please provide the Year, Make, Model and Trim Line of your vehicle.

\* Specify UHF operating frequency



## CELLULAR STYLE ANTENNA

**Looks Like a Cellular Mobile Antenna**  
**Operates at Public Safety Frequencies**

- Avoid drilling holes in leased or rented cars, vans, and trucks
- Exact copy of hands-free cell phone antenna
- Available in glass, roof, magnet, and trunk lip mounts
- Identical to glass mounts used for tracking systems
- Movable without damage to car or antenna

## GLASS MOUNT ANTENNA

MODEL NUMBER	GLMT-SB-7-800
FREQUENCY RANGE (MHz)	760 - 870
POWER RATING (watts)	35
SWR (dB)	2:1
GAIN (dB)	3
MAST LENGTH (inches)	12.7
FINISH	Black
MAST APPEARANCE	Closed coil
FEED LINE	17' RG58
CONNECTOR (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N



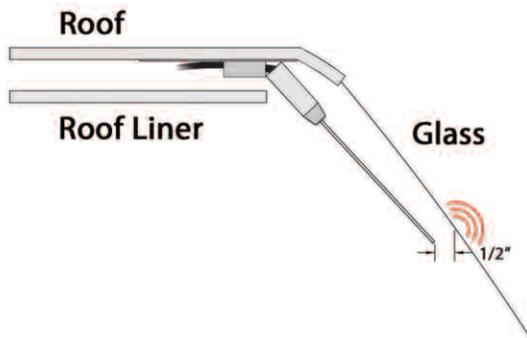
MODEL NUMBER	GLMT-SB-VHF (sedans only)	GLMT-SB-VHF-SUV	GLMT-SB-UHF (sedans only)	GLMT-DB-VHF/7-800 (sedans only)	GLMT-DB-VHF/UHF (sedans only)
FREQUENCY RANGE (MHz)	136 -174	150-174	406-512	136-174 & 760-896	150-174 & 406-512
BANDWIDTH (MHz)	38	24	106	38 136	24 106
POWER RATING (watts)	150	150	150	150 35	150
ISOLATION (dB)				35	35
FINISH	Black				
MAXIMUM HEIGHT (inches)	16	19	14	16	16
MOUNTING HARDWARE	Acrylic adhesive kit				
MAST APPEARANCE	Closed coil				
FEED LINE (per radio)	17' RG58				
CONNECTOR (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N				



## THE STI-CO® STINGER

### Internal Peel & Stick Antenna in 7-800 and 7-800/PCS

- New, improved design for covert and non-covert law enforcement vehicles
- For radio, cellular and mobile data applications
- Mounts above rear window of a car or side window of a van or SUV
- Everything except mast hidden above roof liner (see diagram)
- Installation is fast and easy! Keep mast at least 1/2 inch from window.



MODEL NUMBER	CCAS-SB-7-800	CCAS-DB-7-800/PCS	
FREQUENCY RANGE (MHz)	760 - 896	760 - 896 & 1850 - 1950	
BANDWIDTH (MHz)	136	136	100
SWR	<2:1		
POWER RATING (watts)	35		
MAST MATERIAL	Stainless steel		
MAST LENGTH (inches)	3.1	3.1	1.2
ADHESIVE	VHB high strength tape		
MOUNTING STYLE	Peel and stick		
FEED LINE	20' low loss - 195		
CONNECTORS (Choose one)	PL259, Mini UHF, BNC, TNC, SMA, N		

## COVERT BUMPER ANTENNA

### Completely Hidden Behind the Bumper

- Performs better than similar styles on the market
- Fits most vehicles with non-metallic bumpers
- Install backed by detailed instructions and expert technical support
- System includes 2 antenna elements, mounting tape, cable, and connector



Elements shown in coiled position

MODEL NUMBER	BDAS-SB-VHF	BDAS-NB-UHF
FREQUENCY RANGE (MHz)	136-174	406-512
BANDWIDTH (MHz)	20*	30*
SWR		2:1
POWER RATING (watts)		150
GAIN		Unity
PATTERN	Omni-directional / diversity	
ANTENNA LENGTH (inches)	23	
MOUNTING STYLE	Bumper mounted w/adhesive tape	
FEED LINES (2)	20' low loss -195	
CONNECTORS (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N	

\* Frequency range depends on installation site factors, such as available air space and proximity to metallic structures





## REAR DECK ANTENNA

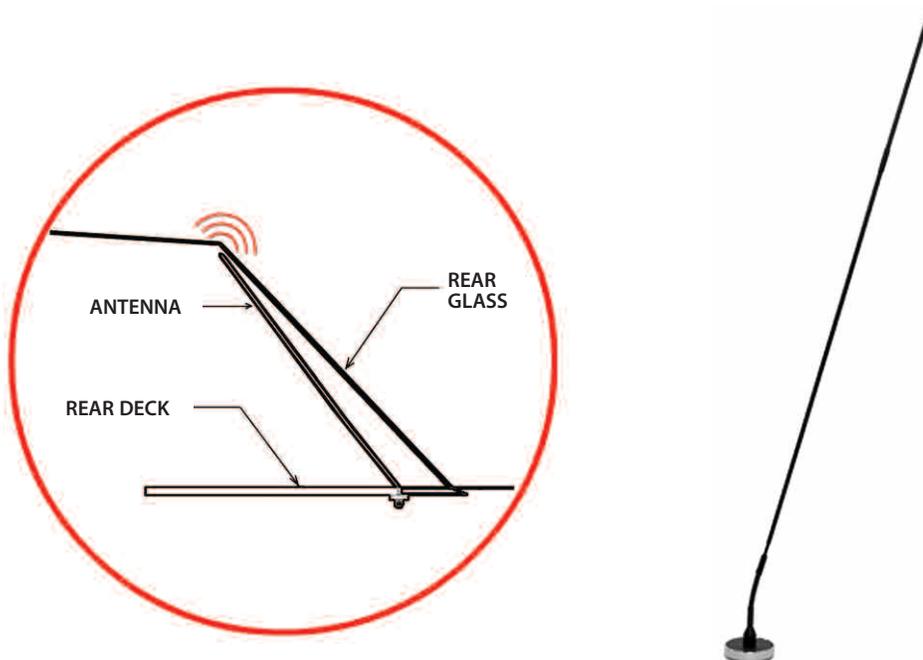
### Installs Quickly and Easily on Rear Window Deck of Sedans

- Discreet size and color blends visually with defroster wires
- Covers entire low or high VHF range as well as UHF, VHF/UHF and VHF/7-800
- Fits most full and midsize sedans. Adapts to different rear window angles and heights
- Easy fine tuning for optimal performance

MODEL NUMBERS	RDCA-SB-VHFL	RDCA-SB-VHF	RDCA-SB-UHF	RDCA-DB-VHF/UHF	RDCA-DB-VHF/7-800
FREQUENCY RANGE (MHz)	136 - 160	150 - 174	406 - 512	150-174&406-512	150-174 746-870
BANDWIDTH (MHz)	24	24	106	24 *34	24 106
SWR	<2:1				
POWER RATING (watts)	150			150 35	
ISOLATION (dB)				35	35
PATTERN	Omni-directional				
MAXIMUM HEIGHT (in.)	20	18	4	17	17
FINISH	Black				
MOUNTING STYLE	Interior rear deck				
FEED LINE	17' RG58			17' low loss -195	
CONNECTORS (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N				

Note: Not intended for metallic tinted windows.

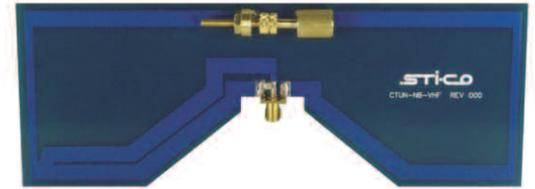
\* Specify operating frequency



## CONCEALED TUNABLE ANTENNA

**With a unique design and enhanced technology**

- Extremely covert – easy to install
- Light weight with ultra-portable design
- Seamless integration – plug and go!
- Field tunable with 3 MHz bandwidth
- Hides inside a tissue box, under a baseball cap or a “For Sale” sign
- Performs better than other versions on the market



MODEL NUMBER	CTUN-NB-VHF
FREQUENCY RANGE (MHz)	150 - 174
BANDWIDTH (MHz)	3
VSWR	2:1
POWER RATING (watts)	10
PATTERN	Omni-directional
DIMENSIONS (inches)	8L X 4W X 2H
FEEDLINE	17' RG174
CONNECTORS (Choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N
MOUNTING HARDWARE	Included





## LTE ANTENNAS FOR COVERT OPS

### Stockable and Perfect for Fleets

- Compact design makes it easy to conceal
- Transferable from one vehicle to another
- Wide bandwidth for superior coverage
- Covers 3G, 4G, GSM, PCS, and WiFi / Bluetooth
- Affordable – fits tight budgets



Blade Style LTE Antenna



Patch Style LTE Antenna

MODEL NUMBER	BLDE-DB-4G/LTE	PTCH-DB-4G/LTE
FREQUENCY RANGE (MHz)	698-960, 1710-2170, 2500-2700	
VSWR	<2:1	<3:1
POLARIZATION	Horizontal	Linear
IMPEDANCE	50 Ohms	
GAIN	2.14 dBi	
POWER RATING (watts)	25	35
OPERATING TEMP (C)	-40° to +85°	-40° to +55°
DIMENSIONS (mm)	6.7 x 14.8 x 119 (max)	11.3 x 60 x 112.5 (max)
ANTENNA INTERFACE	Male SMA connector on 12" RG174	



## COVERT SHARK-FIN VIDEO ANTENNA

### Sleek Modern Design Fits Most Vehicle

- Low profile, high impact ABS plastic housing
- Available in 4.7 GHz for video
- Simple and easy to install!



MODEL NUMBER	SKFN-NB-4.7
FREQUENCY RANGE (MHz)	4300 – 5300
BANDWIDTH (MHz)	1000
SWR	2:1
POWER RATING (watts)	5
GAIN	Unity
PATTERN	Omni-directional
DIMENSIONS (in.)	3 X 3
FEED LINE	12' RG-174
CONNECTOR	SMA





## REAR DECK VIDEO ANTENNAS

### Discrete and Easy to Install

- Covers the 2.3 or 4.7 GHz video ranges
- Perfect for covert or non-covert operations
- Mounts on rear deck of most full and midsize sedans
- Quick and easy to install
- Universal mount is ground plane independent
- COFDM compatible



MODEL NUMBER	RDCA-NB-2.3	RDCA-NB-4.7
FREQUENCY RANGE (GHz)	2.2 - 2.6	4.4 - 4.9
BANDWIDTH (MHz)	400	500
SWR	2:1	
POWER RATING (watts)	50	
GAIN (dBd/dBi)	Unity (2.1)	
IMPEDANCE (Ohms)	50	
FINISH	Black	
MAX. HEIGHT (In.)	1.4	0.75
DIAMETER (In.)	4.5	3.2
FEED LINE	17' Low Loss - 195	15' Low Loss - 195
CONNECTORS (choose one)	PL259, Mini-UHF, BNC, TNC, SMA, N	

## COVERT VIDEO BUMPER ANTENNA

### Hides Behind the Bumper

- Covers the entire 4.7 GHz video range
- Perfect for covert operations
- Mounts behind non-metallic bumpers on most vehicles
- Install backed by detailed instructions and expert technical support
- System includes 2 antenna elements with feedline, mounting tape, cable and connector



MODEL NUMBER	BDAS-NB-4.7
FREQUENCY RANGE (GHz)	4.4 - 4.9
BANDWIDTH (MHz)	500
SWR	2:1
POWER RATING (watts)	50
GAIN (dBd/dBi)	Unity (2.1)
IMPEDANCE (Ohms)	50
COMPONENTS	2 Elements with 10' feedlines, 1 splitter
FINISH	Black
THICKNESS (In.)	.25
DIMENSIONS (In.)	3.4 X 3.5
CABLE KIT	15' Low Loss - 195
CONNECTOR	SMA





## TACTICAL / INTEROPERABLE ANTENNA SYSTEMS

**STI-CO® offers multiband interoperable and tactical antenna solutions for critical incidence deployment.**

Our specialized emergency management antenna and ground plane solutions are engineered with the importance of quick, easy deployment with seamless interoperable communication between tactical or emergency responder teams. Our rugged systems come with our five year warranty assuring you of our STI-CO® quality. Available in VHF, UHF, 7-800 and the aviation band.

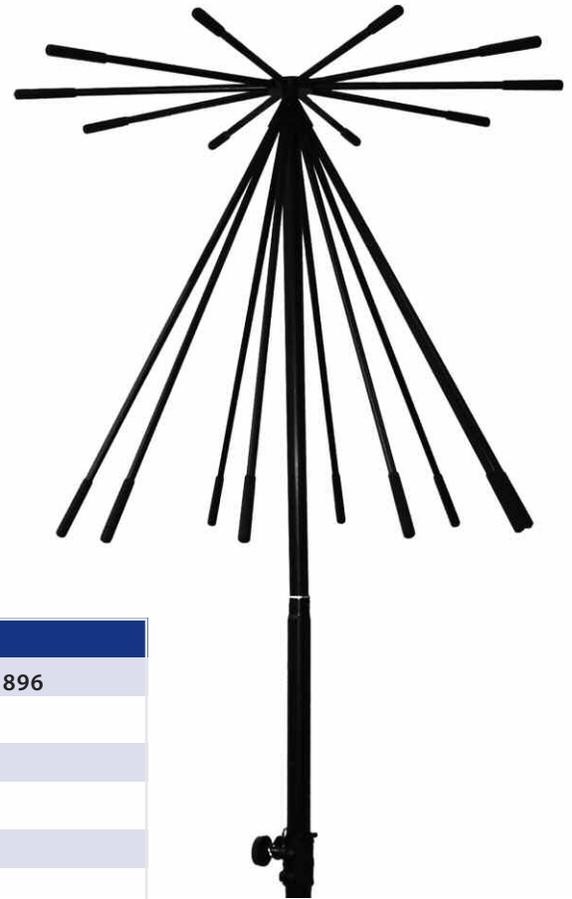




## INTEROPERABLE TACTICAL ANTENNA

**Rugged, Fast Setup Multi-Band Antenna  
Now Available With Public Safety Band!**

- Tri-band for VHF, UHF, and 7-800 MHz
- Optional aviation band
- Simplifies cabling
- No tools needed to setup
- Reduces intermodulation issues
- Compatible with gateway transmission systems



MODEL NUMBERS	IOAK-TB-V/U/C or IOAK-QB-A/V/U/C			
FREQUENCY RANGE (MHz)	(A) 106 - 130	(V) 150 - 174	(U) 380 - 512	(C) 760 - 896
BANDWIDTH (MHz)	24	24	132	136
SWR	<2:1			
POWER RATING (watts/ transmitter)	150			
GAIN (dB)	Unity			
PATTERN	Omni-directional			
INSERTION LOSS	1.5 dB per port			
ISOLATION	>20 dB per port			
MAXIMUM HEIGHT (inches)	35.5			
MAST MATERIAL	Aluminum			
FINISH	Black			
SHAFT DIAMETER (inches)	1.25			
FEED LINE (from antenna)	50' low loss - 195			
FEED LINES (from coupler to radios)	3' low loss - 195			
CONNECTORS (one per radio)	PL259, Mini-UHF, BNC, TNC, SMA, or N			





## INTEROPERABLE MOBILE ANTENNAS

### Multi-frequency Antennas for Interoperability in Vehicles

#### TRI-BAND MAGNET & ROOF MOUNTS

- Tri-band for VHF, UHF and 7-800 MHz
- Compatible with interoperable gateway systems
- Reduces intermodulation issues
- Single port for 700 or 800 MHz radio



#### TRI-BAND GLASS MOUNT ANTENNA

- Mounts on rear window of sedan with high strength adhesive
- Simplifies cabling
- Compatible with interoperable gateway systems
- Whip adjusts up to 90° to compensate for variances



MODEL NUMBERS	MGNT-TB-V/U/C or ROOF-TB-V/U/C			GLMT-TB-V/U/C (sedans only)
FREQUENCY RANGE (MHz)	(V) 150-174 (U) 380-512, (C) 760 - 896			
BANDWIDTH (MHz)	24	132	136	
INSERTION LOSS (dB/port)	1.5			
ISOLATION (dB/port)	20	20	35	
MOUNTING STYLES	Magnet mount	Roof mount	Glass mount	
POWER RATING (watts/transmission loss)	150			35
MAST APPEARANCE	Center mast with extensions			Closed coil
FEED LINE (from antenna)	17' low loss - 195			17' RG58/radio
FEED LINES (from coupler to radios)	3' low loss - 195			
CONNECTORS (choose three)	PL259, Mini-UHF, BNC, TNC, SMA, N			

# STI-CO® TRI-BAND OR QUAD-BAND COUPLER

## Multi-Band to Simplify Antenna Deployment

- Wideband coupler allows simultaneous communication
- Simplifies and reduces cost of cabling
- Ideal for interoperable gateways or software defined radios
- Rugged military grade enclosure with N type connectors
- Easily handles high power with low insertion loss

MODEL NUMBER	COUP-V/U/C or COUP-A/V/U/C			
FREQUENCY RANGE (MHz)	106-130	138-174	380-512	760-896
BANDWIDTH (MHz)	24	36	132	136
SWR	2:1			
POWER RATING (watts)	150			
INSERTION LOSS (dB)	<1.5			
ISOLATION (dB)	>20			



STI-CO® Quad-Band Coupler



STI-CO® Tri-Band Coupler



Optional Black Tripod



Optional Storm® Case



## COMPACT PORTABLE ANTENNA

**Durable, Quick Deploy Antenna. Now available in VHF/UHF Dual Band**

- Supports base station or repeater in remote areas
- Hangs from a tree or beam or mounts on any flat surface
- Stakes to the ground for quick deployment
- Increases range and gets signal above ground clutter
- Easily fits inside a backpack or field kit



MODEL NUMBERS	CPAK-NB-VHF	CPAK-SB-UHF	CPAK-SB-CEL	CPAK-DB-VHF/UHF	
FREQUENCY RANGE (MHz)	136 -174	340-512	806 -896	150 -174 & 380-512	
BANDWIDTH (MHz)	21*	90*	90	24	132
VSWR	<2:1				
POWER RATING (watts)	150	150	50	150	50
PATTERN	Omni-directional				
MAX. LENGTH EXTENDED	31"	10"	6.5"	28.5"	
MAX. LENGTH COLLAPSED	10.5"	7.5"	4.7"	10.1"	
FINISH	Black				
WEIGHT (lbs.)	0.3	0.2	0.1	4.1	
CABLE KIT	20' low loss -195				
CONNECTORS (choose one)	PL259, Mini UHF, BNC, TNC, SMA, N			TNC*	

### Complete kit includes:

- Soft-sided case, 15" x 4" diameter rolled to fit into backpack or briefcase
- 100' lanyard of black nylon rope
- Magnet base to mount to metal structure
- Stake mount assembly to increase range

**Note:** Lanyard included if ordering antenna alone.

\* The TNC connector is recommended for the dual band VHF/UHF model.

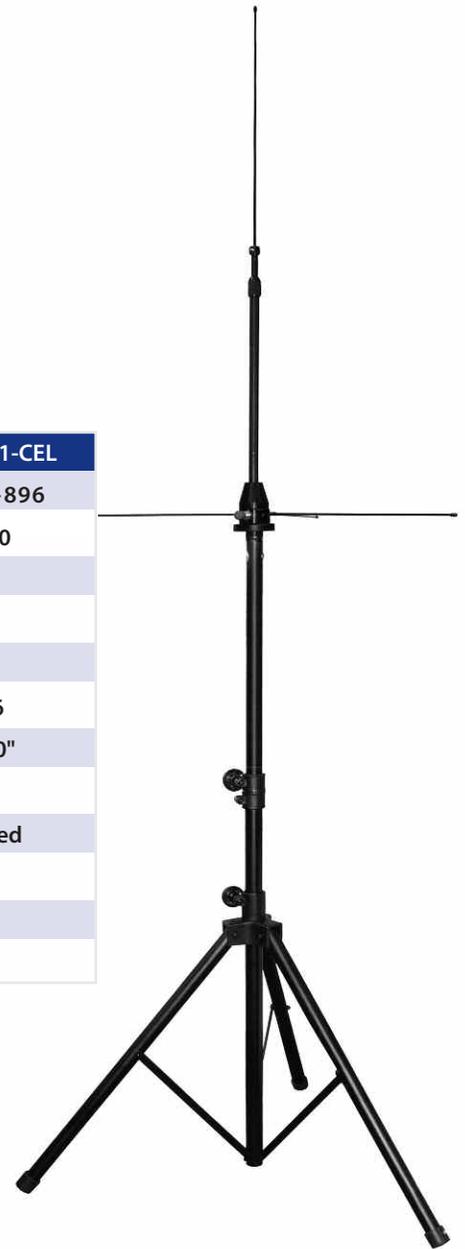
## FIELD PORTABLE ANTENNA KIT

### Rugged Design for Temporary Base Stations

- Set-up base station antenna quickly in emergency headquarters
- Compact, rugged and lightweight
- Just minutes to deploy or remove
- Out performs unity gain, vehicle mounted antennas

MODEL NUMBERS	FPAK-1-VHF	FPAK-1-UHF	FPAK-1-UHFH	FPAK-1-CEL
FREQUENCY RANGE (MHz)	140-174	400-440	440-512	806-896
BANDWIDTH (MHz)	10*	40	72	90
SWR	<2:1			
POWER RATING (watts)	150			
PATTERN	Omni-directional			
GAIN (dB)	5	5	5	6
MAXIMUM HEIGHT	39-54"	19"	<18"	30"
FINISH	Black anodized aluminum			
MAST APPEARANCE	Adjustable	Fixed	Fixed	Fixed
WEIGHT	32 lbs			
CABLE KITS	50' low loss - 195			
CONNECTORS (Choose one)	PL259, Mini UHF, BNC, TNC, SMA, N			

\* The 10MHz band width is based on the lowest tunable frequency





## TACTICAL VEST ANTENNA BRACKET

### Designed for MOLLE-Style Vests

- Extends radio antenna above the shoulder for better signal
- Excellent for use by SWAT, ERT's and other critical response teams
- Designed specifically for use with APEX-style radios
- Unit is covered with heavy duty elastic material to keep out debris
- Available in desert tan, olive drab or tactical black to match vest

MODEL NUMBER	VTAB-SF*
INSERTION LOSS (dB)	< 0.5 up to 900 MHz
MATERIAL	Elastic Covered Black Steel Bracket
BRACKET DIMENSIONS (in.)	6.5h x 1.25w x .09
WEIGHT (lbs.)	0.2
COLORS (Choose One)	Desert Tan, Olive Drab or Tactical Black
MOISTURE PROTECTION	Water Resistant
CABLE	32" RG58
CONNECTOR	SMA

\*Add -T for desert tan, -G for olive drab or -B for black



*Extends radio antenna above the shoulder for better signal*

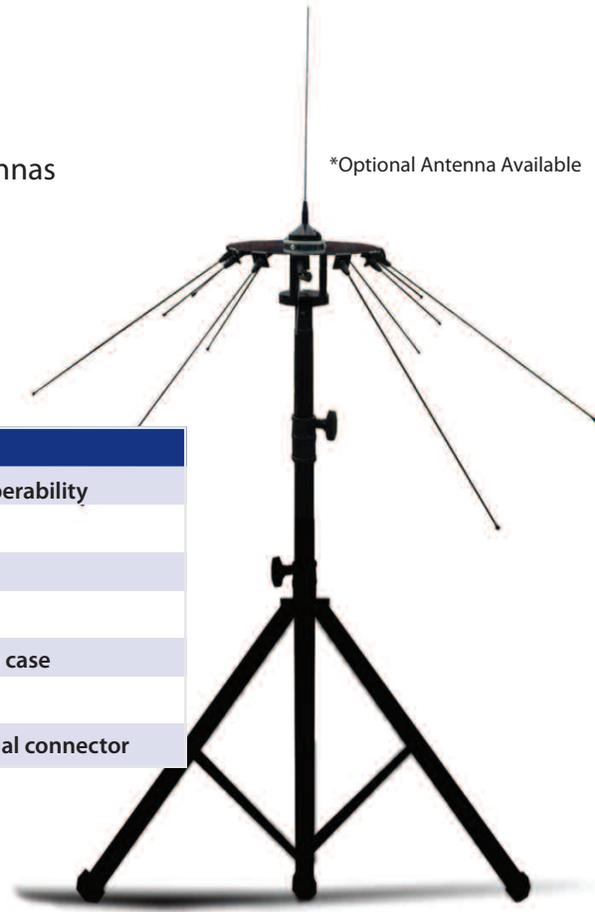


## DEPLOYABLE GROUND PLANE SYSTEM

### Tactical System for Fast Set up

- Designed to work with your existing magnetic or NMO base antennas
- Quick and easy set up for rapid deployment
- Engineered for use of UHF, VHF and 3G/4G frequencies
- Tough, durable and corrosion resistant

\*Optional Antenna Available



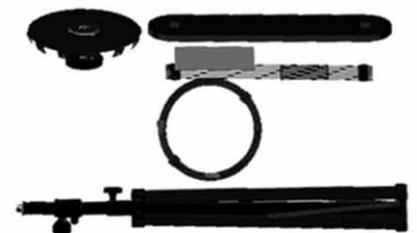
MODEL NUMBER	IOAK-GPK-STM
FREQUENCY	UHF, VHF, Cellular, 4G LTE, custom bands for interoperability
MAX HEIGHT	79" MAX, not including mounted antenna
FINISH GROUND PLANE DISK	Black powder coated steel
FINISH GROUND PLANE TRIPOD	Black powder coated aluminum
WEIGHT	12.6 lbs., not including additional antennas and case
CABLE	25' low loss, heavy duty coaxial cable
CONNECTOR	Male N-Type Coaxial connector, and Male TNC type coaxial connector



Ground plane disk and radials are powder coated steel with nickel plated brass threads



Rugged STORM® case with custom fit foam case for easy storage and quick removal



Accessories include 25' of low loss cable and an anodized tripod



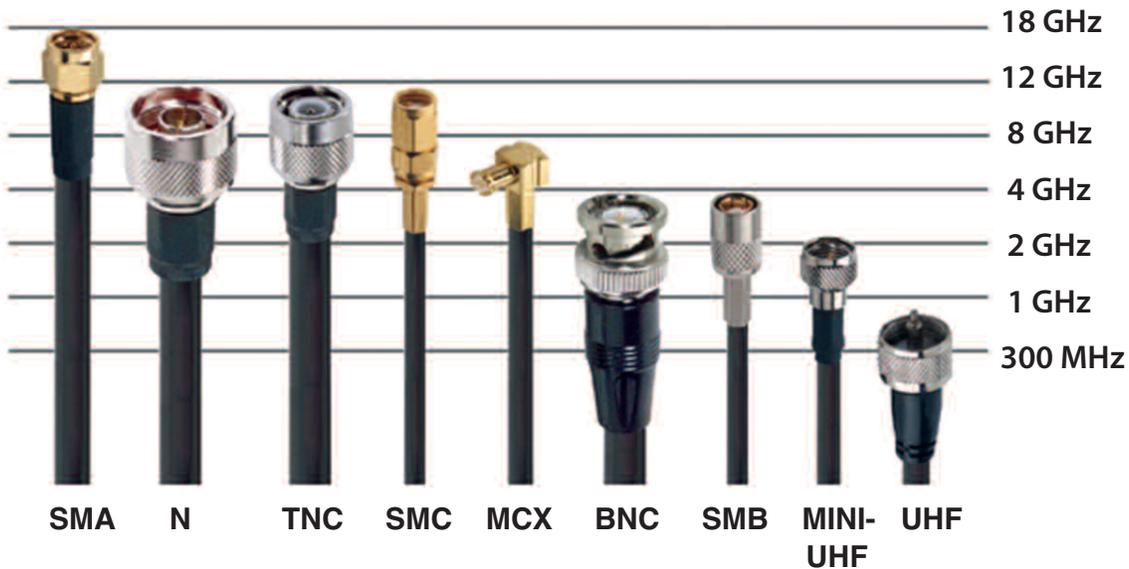
## STI-CO® CABLE KITS

### Custom Designed to Fit Your Specific Needs

- Cable kits built to your own specs
- Your choice of connector - installed or loose
- Quick order turnaround
- Technical assistance available if needed
- Custom power and data cables available upon request



### CONNECTOR TYPES



### CABLE TYPES

Cable Type	Group	Ohms	Dielectric Type	O.D. (in)	DB/100 ft	Shield
RG 316/U	B	50.0	ST	0.102	20.0	Braid
RG 174/U	B	50.0		0.110	14.7	Braid
RG 58/U	C	53.5	PE	0.195	11.7	Braid
RG 303/U	C	50.0	ST	0.170	9.0	Braid
Low loss - 195	C	50.0	Foam PE	0.195	7.8	Foil



### Need Help?

If you have any questions about a STI-CO® antenna solution product and/or the contents or need assistance with the installation or usage of a product, please feel free to contact STI-CO® Support at our toll free number: 866-307-8426. We also have supporting documentation of most our products available on our website ([www.sti-co.com](http://www.sti-co.com)).

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