



COTA
INTERNATIONAL, INC.

The Spirit of Communications



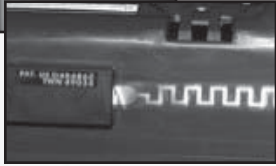
EXCALIBUR

ANTENNAS & ACCESSORIES

**HEAVY-DUTY
PROFESSIONAL PRODUCTS**



COTA'S HIDDEN AM, FM AND TV ANTENNA SYSTEMS FOR RV'S, INSIDE MIRRORS, UP IN THE HEADLINER, AUTOMOTIVE AND MOTORCYCLES



MSA - 1

AM-FM Radio

The MSA-1 is a new proprietary design that enhances performance with its unique MICRO SCREEN element. AM-FM reception is not affected when vehicles or marines are traveling in relationship to the radio broadcasting station.

Easy to install on the inside of a car, boat, motorcycle or RV with 3M VHB adhesive tape. No mounting holes required. No car or boat vandalism problem. 100% weather-proof. Operates on DIGITAL and traditional AM-FM radio reception.

The enhanced performance is close to traditional antennas and is extremely omni-directional.

The MSA-1 can be mounted on non-metallic surfaces and glass, even out of sight on the car or boat body of fiberglass. It fits any land or marine vehicle.

SPECIFICATIONS	MSA-1
Radio Band	AM band & 76-90 or 88-108MHz
Gain	Unity
Element Length	60mm (24in)
Output Plug	Standard Car Radio Type
Cable	Less Loss 5Y-P1.9M (6.3 ft)
Weight	0.1KGS
Dimensions	61cm x 1cm
Option	Special Plug Variable

MSA - 2

TV

The MSA-2 is a new proprietary design that enhances performance with its unique MICRO SCREEN element. TV reception is not affected when vehicles or marines are traveling in relationship to the TV broadcasting station. Compatible for NTSC, PAL and SECAM world wide TV system.

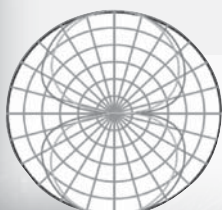
Easy to install on the inside of a truck, car, boat and RV with 3M VHB adhesive tape. No mounting holes required. No car or boat vandalism problem. 100% weather-proof. Operates on DIGITAL and traditional TV reception.

The enhanced performance is close to traditional antennas and is extremely omni-directional.

The MSA-2 can be mounted on non-metallic surfaces and glass, even out of sight on the car or boat body of fiberglass. It fits any land or marine vehicle.

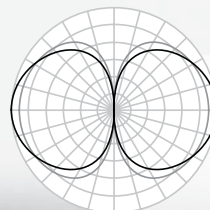
The angle of the antenna elements can be adjusted from the coupler box.

SPECIFICATIONS	MSA-2
Radio Band	VHF-UHF full channels
Gain	>2.5 dBi
Element Length	610mm (24in) x 2
Output Plug	75 ohms 'F' male type
Cable	2.5C-2V 75 ohms 15 ft.
Weight	0.1KGS
Dimensions	123cm x 1cm
Option	Special Plug Variable



RADIATION PATTERN COMPARING CHART

E-PLANE TRADITIONAL VERTICAL WHIP
 MSA-1
H-PLANE MSA-1



RADIATION PATTERN COMPARING CHART

TRADITIONAL DIPOLE
 MSA-2

MSA - 3

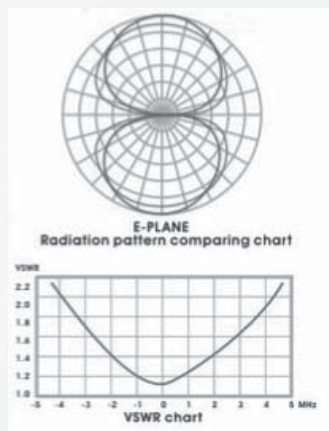
UHF - VHF

Digital Micro Screen VHF-UHF ANTENNA

- The MSA-3 is a new proprietary design that enhances performance with its unique MICRO SCREEN element. Easy to install on the inside of a car or boat with 3M VHB adhesive tape. No mounting holes required. No car or boat vandalism problem. 100% weather-proof. Operates on VHF or UHF bands. Standard 50 ohms output impedance.
- The enhanced performance is close to traditional outside vertical antennas and is extremely omni-directional.
- The MSA-3 can be mounted on non-metallic surfaces and glass, even out of sight on the car or boat body of fiberglass. It fits any land or marine vehicle.



APPLICATION



SPECIFICATIONS	MSA-3
Frequency Range	150-174 or 405-475 MHz
Gain	3/5 dBi
Max. Power Load	60W max.
VSWR	Less than 1.5:1
Output Connector	UHF male (PL-259)
Cable Length	15 ft. RG-58 A/U
Weight	0.15 KGS
Dimensions	50 cm x 1 cm

MSA - 4

Dual Band Cellular

Digital Micro Screen MOBILE PHONE ANTENNA

- The MSA-4 is a new proprietary design that enhances performance with its unique MICRO SCREEN element. Cellular performance and hands off is improved when land or marine vehicles are traveling in relationship to the cell-site.
- Easy to install inside of a car or boat with 3M VHB adhesive tape. No mounting holes required. No car or boat vandalism problem. 100% weather-proof. This antenna operates on DIGITAL and traditional mobile phone communication bands AMPS, GSM, PCN, PCS and other mobile phone systems.
- The enhanced performance is close to traditional outside vertical antennas and is extremely omni-directional.
- The MSA-4 can be mounted on non-metallic surfaces and glass, even out of sight on the car or boat body of fiberglass. It fits any land or marine vehicle.



APPLICATION



SPECIFICATIONS	MSA-4
Frequency Range	800/1900MHz or 900/1800 MHz
Gain	3/5 dBi
Max. Power Load	25W max.
VSWR	Less than 1.5:1
Output Connector	TNC or FME
Whip Style	MSA
Antenna Type	with cable
Weight	150g
Dimensions	61 cm x 1 cm

INVISIBLE & REVOLUTIONARY!

CB Antennas

#SH750

Super Hawks - Single Coil

Mobile CB Antenna

Freq Range 26-29 MHz
Stainless Steel Whip
Tunable for 1.5:1 SWR or Less

15,000 Watts

3/8" x 24 Stud Mount
5" Adjustment



#SH-1000

Super Hawks - Double Coil

Mobile CB Antenna

Freq Range 26-29 MHz
Stainless Steel Whip
Tunable for 1.5:1 SWR or Less

15,000 Watts

3/8" x 24 Stud Mount
8" Adjustment



Raven Rods

#RD 24 - 24"

#RD 36 - 36"

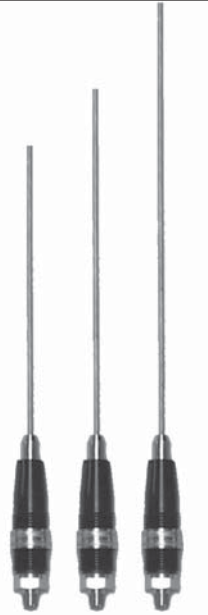
#RD 48 - 48"

Ring Tunable Antenna

17/7 PH Stainless Steel Whip
Fits 3/8" x 24 Stud
Unique twist-n-tune rings
makes the job in tuning - easy

[The lower the SWR,
the better the range/
performance.]

Great Antenna for
RV-Motor Coach's



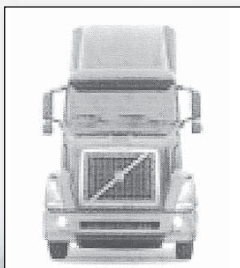
FALCON Whips!

#F202 - 24"

#F303 - 36"

#F404 - 48"

- 1,000 Watts rated, super range, rugged fiberglass, not [fiber rod]
- Top loaded, helix-wound
- With Weather Band Trap
- Available in: White, Black, and Red colors



FALCON Whips!

Single Kits

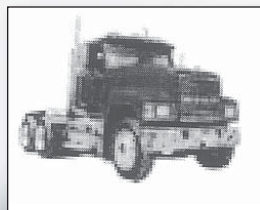
Everything you need.

#F421-2 - 24"

#F421-3 - 36"

#F421-4 - 48"

- 3-Way Double groove mounts
- 12' RG58AU Coax Fiberglass Bull Whip, 1000 Watts rated
- With Weather Band Trap
- Available in: White, Black, and Red colors



FALCON Whips!

Dual Kits

Everything you need.

#F422-2 - 24"

#F422-3 - 36"

#F422-4 - 48"

- 3-Way Double groove mounts
- 12' RG58AU Coax Fiberglass Bull Whip, 1000 Watts rated
- With Weather Band Trap
- Available in: White, Black, and Red colors



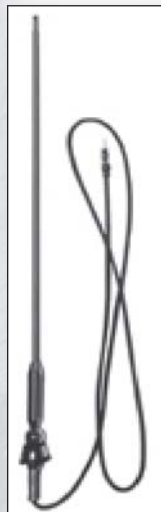
AM & FM Antennas

EXC400-1

Description: Antenna - 16" Flexible Mast - Universal Top or Side Mount with 60" Cable

Features:

- Flexible Mast
- Rust Proof
- Wire Wound Mast w/Rubber Coating
- Split Ball Adjustable Base
- Includes 60" Antenna Cable



EXC400-2

Description: Antenna - Telescoping 54-1/4" Steel Mast - Universal Top or Side Mount

Features:

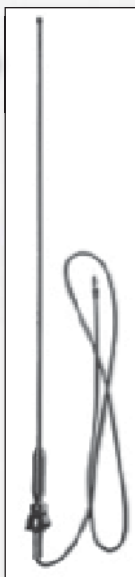
- Telescoping 54-1/4" Steel Mast
- Split Ball Adjustable Base
- Heavy-duty Spring
- Mast Adjustable to 180 degrees
- Includes 54" Antenna Cable

EXC400-4

Description: Antenna - 31" Steel Mast - Universal Top or Side Mount

Features:

- One Section, 31" Mast
- Split Ball Adjustable Base
- Heavy-duty Spring
- Mast Adjustable to 180 degrees
- Includes 54" Antenna Cable
- Universal Top or Side Mount



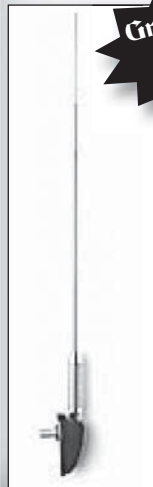
Great OEM Tractor Antenna

EXC400-5

Description: Antenna - 31" Steel Mast - Side Mount

Features:

- One Section 31" Steel Mast
- Side Mount
- Heavy-duty Spring
- Includes Detachable 54" Antenna Cable



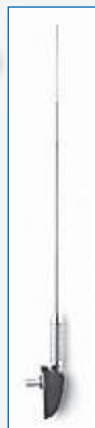
EXC400-6

- Universal pillar mount applications
- 50"/127 cm 3-section retractable mast
- 48"/122 cm cable



EXC400-7

- Offset left/right hand pillar mount
- 50"/127 cm 3-section retractable mast
- 65"/165 cm cable



EXC400-8 1997-Up Round Base, Fit OEM Jeep & Others

- 31"/79 cm 1-section black removable mast
- 42"/107 cm cable (Cable includes factory connector)



EXC400-9

- European amplified roof antenna for AM/FM bands
- 15"/38 cm black helical wind removable fiberglass mast
- 6"/15 cm coaxial cable and power supply wire



EXC400-10 Universal Oval Bar 1979-UP

- Universal oval base antenna
- 31"/79 cm removable mast with 72"/183 cm cable



EXC400-11

- Amplifier for AM/FM bands with bypass switch, in-dash or under dash mounting
- 3/4"/20 mmH 19/16/40 mmW x 3 3/4"/95 mmD
- 21"/53 cm coaxial cable and power supply wire

EXC400-15

Universal Antenna Adapter



- Male to two female cable

EXC400-16

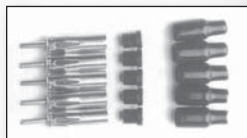
Universal Antenna Adapter



- Female to two male cable

EXC400-17

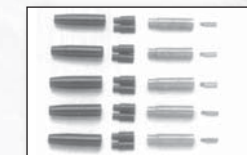
Universal Antenna Connectors



- Standard male antenna plug (5/bg)

EXC400-18

Universal Antenna Connectors

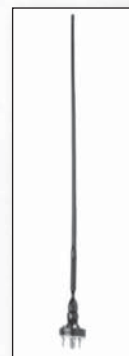


- Standard female antenna connector (5/bg)

EXC400-19

Side or Top Mount Rubber Antenna

- Universal Antenna for [4] hole application
- Hole Mounting Base
- 14"/36cm removable black conductive rubber mast
- 96"/244 cm detachable low capacitance cable



Extension Cables

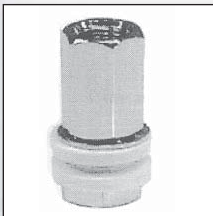
- | | | | |
|---------|---------|----------|----------|
| • EC-12 | 12 inch | • EC-96 | 96 inch |
| • EC-18 | 18 inch | • EC-120 | 120 inch |
| • EC-24 | 24 inch | • EC-144 | 144 inch |
| • EC-36 | 36 inch | • EC-204 | 204 inch |
| • EC-48 | 48 inch | • EC-240 | 240 inch |



CB Mounts & Accessories



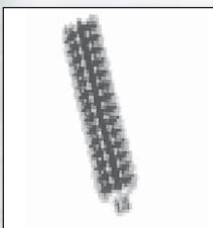
EXC20AD
All Brass 3/8" x 24
SO-239-Stud
Mount



EXC20HD
All Brass 3/8" x 24
Spade Stud Mount



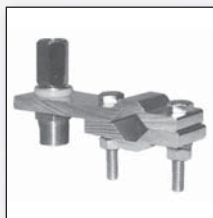
EXC54HD
3/8" x 24
Stainless Steel
Spring
for Antennas up
to 60"



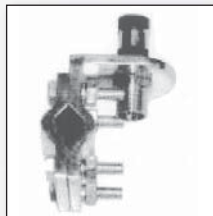
EXC53
Mid-duty 3/8" x 24
Stainless Steel
Spring
for Antennas up
to 48"



EXC10AD
Double Groove
Right-Angle Mirror
Mount
with EXC20AD
Stud



EXC11AD
Double Groove
Right-Angle
Mirror Mount
with EXC20AD
SO-239 Stud



EXC12AD
3-Way Double
Grove Mount
with EXC20AD
SO-239 Stud



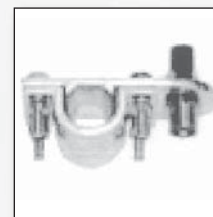
EXC13
Antenna quick
disconnect, all
brass, chrome
plated, 3/8" x 24
base. 3-1/4" Long,
stainless steel
spring inside



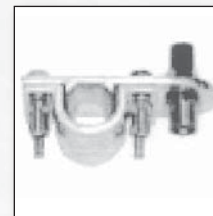
EXC18AD
QUICK Release,
Hinge Mount
w/SO-239
• 6061 T6 aircraft
quality aluminum
• Won't rust
• Super bright



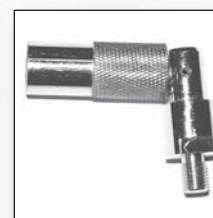
EXC19
#7 Vise Grip
Antenna Mount,
slip seater
designed works
great, heavy-duty,
with #IH20AD
SO-239 stud for
3/8" x 20 antenna
hook ups



EXC136AD
Antenna Mount -
1-1/4" Mirror
mount.
High quality
aircraft aluminum
mirror mount for
large mirror arms.
Inside diameter
is 1 1/4"; ideal for
Freightliner and
Mack trucks.
Stud included.



EXC137AD
Antenna Mount -
1-1/8" Mirror
mount.
Same as EXC136
with - Inside
diameter is 1
1/8"; ideal for
International and
other Carriers.
Stud included.



EXC203AD
3/8" x 24
180 Degree
Fold-Over Mount

CB Cables and Harnesses



**Co-Phasing
Cables**
RG59AU 95%
Shield with
Molded Ends
PL-259 On Each
End
EXC599 - 9'
EXC5912 - 12'
EXC5918 - 18'

(75 ohm's)



**Coaxial
Single
RG58AU**
RG58AU 95%
Shield with
Molded
PL-259's
EXC583 - 3'
EXC586 - 6'
EXC589 - 9'
EXC5812 - 12'
EXC5818 - 18'
EXC5821 - 21'

(50 ohm's)

***Our Mission
is to Deliver
Superior Quality
High-Technology
Services and
Products Ethically,
Responsively and
Cost-Effectively***

Commercial Two-Way



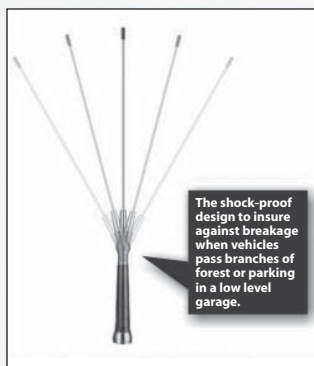
X-60CM
X-27CB

• The X series antenna are designed for CB and 6 meter wave wireless communications. The X-60CM works on 50 MHz band. The X-27CB operates on 27 MHz CB band. The high reliability construction of antenna body provides more stable TX/RX signal when vehicles are travelling in relationship to the mobile or base station. Output connector is built in a standard UHF male (PL-259) type.

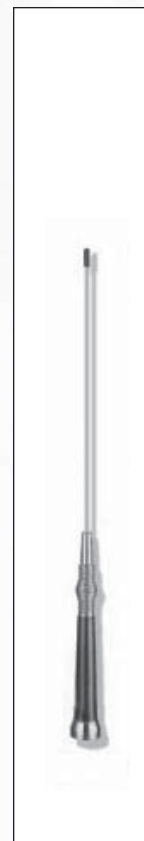
SPECIFICATIONS	X-60CM	X-27CB
Frequency Range	47-55 MHz	26-28 MHz
Gain	Unity	
Max. Power Load	100W max.	
VSWR	Less than 1.5:1	
Output Connector	UHF male (PL-259)	
Wave Length	1/4?	1/8?
Weight	170 g	170 g
Dimensions	135 cm	135 cm

• Sometimes a short antenna is required for commercial radio communication. The EX-2V and EX-70U has a quarter wave whip for such application. The operation frequency range can be selected by cutting whip. The whip cutting table is included with antenna package. The antenna body is constructed of a heavy-duty black ABS housing with shock-proof spring.

SPECIFICATIONS	EX-2V	EX-70U
Frequency Range	130-174 MHz	405512 MHz
Gain	Unity	
Max. Power Load	100 Watts max.	
VSWR	Less than 1.5:1	
Output Connector	NMO 3/4"	
Wave Length	1/4?	
Weight	250 g	230 g
Dimensions	118 cm	48 cm



EX-2V



EX-70U

TA-1NMO Trunk Lip

- Mount 15' RG-58/U
- Meets Mil-STD-19C
- Complete with PL-259 Connector



Jm-100NMO Super Low Profile Magnetic Mount Kit

- 15' RG-58/u Cable and Connector
- Will fit all NMO Antenna hook-ups



3/4" Surface Mounting Kits



All Cables 16' long and PL-259 connected

CL-1

- RG-188A/U

CL-2

- RG-58A/U

CL-3

- Low loss teflon
- RG-188A/U



GPS Antennas

EXC 3977 Through-hole Mount GPS Antenna

Features

- Rugged, compact all-plastic non corrosive housing
- 3/4 inch through-hole mount
- Voltage range 2.7 - 5 V
- LNA 28 dB gain typical
- Low noise figure 1.5dB
- Good out-of-band signal rejection
- Value priced



EXC 3977 Through-hole Mount GPS Antenna

The EXC 3977 through-hole mount GPS Antenna provides very high out-of-band rejection performance. It features a custom designed ceramic patch element that minimizes detuning effects caused by adjacent objects. This element, along with a low noise amplifier and SAW filter, enables the EXC 3977 to provide a consistent, clear signal while minimizing loss-of-lock when GPS conditions are less than ideal. Housed in a compact all-plastic, low profile package. Designed for permanent mount installations, the EXC 3977 through-hole GPS Antenna is the optimum choice for dependable, clear and consistent GPS signal reception.

Designed for maximum GPS performance, the EXC 3977 Antenna's advanced circuitry integrates a SAW filter and low-noise amplifier to ensure a most reliable and clear signal for the GPS receiver even in the most difficult conditions. Where other GPS antennas fail, the EXC 3977's great out-of-band rejection and low noise characteristics can provide a very reliable signal - critical for improving acquisition times and minimizing outages.

Applications

- Permanent Mount Vehicle Installations
- Marine Vessel Installations
- Fleet Management & Telematics
- Cellular Base Station Clocking and Timing
- WLAN Wireless Broadband Clocking and Timing

All EXC 3xx7'S Antennas on this page have the following spec's

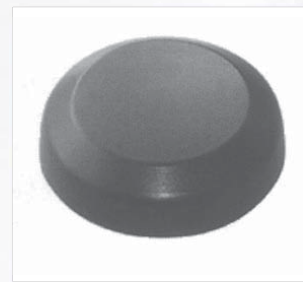
EXC 3977's Technical Specifications

Environmental Specifications	temperature	Operating: -40c to +85c (-45c to +85c storage)
	humidity	95% max (non-condensing)
	dimensions	66 mm dia. x 44.4 mm H
	weight	50g
Mechanical	mounting	Single hole, 3/4 - 16 threaded mount
	connector	TNC
	shock	Vertical axis 50G Other axes 30G
	vibration	3 axis, sweep = 15 min 10 - 200 Hz log sweep: 3G
Antenna Response	frequency	1575.42 MHz
	gain	@ 90° 3 dBic @ 20° -2.0 dBic
	polarization	Right Hand Circular @ 90° 4 dB @ 20° 6 dB
	axial ratio	@ 20° 6 dB
Electrical	voltage	2.7 - 5 VDC
	current	15 mA @ 5V, 9 mA @ 3.3V
	frequency	1572.42 - 1578.42 MHz
	output impedance	50 Ohm
LNA Specifications	VSWR	1.5:1 max (at connector) @ 3.3VDC: 28 dB (typical) @ 5VDC: 30 dB (typical)
	gain	@ 3.3VDC: 28 dB (typical) @ 5VDC: 30 dB (typical)
	out-of-band rejection	+/- 15 MHz: 5 dB +/- 20 MHz: 10 dB +/- 30 MHz: 32 dB +/- 40 MHz: 40 dB

EXC 3997 Low Profile Surface Mount GPS Antenna

Features

- Extremely compact all-plastic, weather proof, non-corrosive housing
- Lowest external profile
- Lowest in-vehicle connector profile
- Small mounting holes
- Large, high performance patch element
- Voltage range 2.7 - 5 V
- LNA 28 dB gain typical
- Low noise figure 1.5dB
- Good out-of-band signal rejection
- Value priced



EXC 3997 Low Profile Surface Mount GPS Antenna

The EXC 3997 surface mount GPS Antenna provides very high performance in a very small form factor. It features a custom designed ceramic patch element that minimizes detuning effects caused by adjacent objects. This element, along with a low noise amplifier and SAW filter, enables the EXC 3997 to provide a consistent, clear signal while minimizing loss-of-lock when GPS conditions are less than ideal. The WS3997 is housed in a very compact all-plastic, non-corrosive low profile package. Designed for permanent mount installations, the WS 3997's thru surface connector provides the lowest in-vehicle profile. Truly is the optimum choice for dependable, clear and consistent GPS signal reception. EXC3997 comes with a MCX jack connector, and a flying cable option is also available.

Designed for maximum GPS performance, the very compact EXC3997 antenna's advanced circuitry integrates a SAW filter and low-noise amplifier to ensure a most reliable and clear signal for the GPS receiver even in the most difficult conditions. Where other GPS antennas fail, the EXC 3997's great out-of-band rejection and low noise characteristics can provide a very reliable signal - critical for improving acquisition times and minimizing outages.

Applications

- Permanent Surface Mount Vehicle Installations
- Fleet Management & Telematics
- Marine Vessel Installations
- Cellular Base Station Clocking and Timing
- WiMAX & Fixed Wireless Broadband Clocking and Timing

EXC 3917 High Gain GPS Antenna

Features

- Voltage range 2.7 - 5 V
- LNA 28 dB gain typical
- Low noise figure 1.5dB
- Great out-of-band signal rejection
- Magnet or screw mount
- Large range of connector types
- Value priced



The EXC 3917 GPS Antenna is a high-value antenna with a wide voltage range, ideally suited to AVL and telematics platforms for vehicle-mounted use. Using internal magnets or screw mount holes, the antenna can be installed almost anywhere on a vehicle allowing great flexibility. The EXC 3917 antenna features a high gain (28 dB) low noise amplifier and a SAW filter. With a wide range of connectors and 3 to 5 volt operation, the antenna can be used with almost any GPS system available.

Designed for a wide range of GPS devices, the EXC 3917 Antenna meets or exceeds OEM manufacturer's recommended specifications for optimum GPS performance. The EXC 3917 antenna is housed in durable PVC plastic for reliability in extreme weather conditions. Mounting the EXC 3917 Antenna is easy with the reliable magnetic mount or through holes for screws.

Applications

- Automotive Navigation
- Fleet Management & Telematics
- Marine Navigation
- Asset Tracking
- Military Radio and Vehicle
- Law Enforcement
- Clock & Timing using GPS

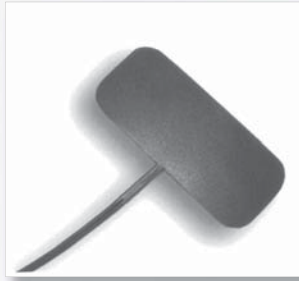
GPS Antennas - GPS CELL 3G 2.4 GHz

EXC 3947

GPS/Cell/3G/2.4 GHz Combined Covert Antenna

Features

- Low price
- GPS, Quad-band Cellular, 3G & 2.4 GHz band reception
- Semi-flexible for embedded and covert installations
- Excellent out-of-band signal rejection
- High gain active GPS antenna
- Easy to install
- Wide range of connector types available.
- RoHs Compliant



GPS/Cell/3G/2.4 GHz Combined Covert Antenna

Cota International, EXC3947 GPS, Quad Cellular, 3G & 2.4 GHz ISM Band antenna is an excellent choice for Telematics systems requiring dependable and highly accurate positioning data, as well as clear and consistent host-to-vehicle communications via Quad band Cellular, 3G and 2.4 GHz ISM Band such as WiFi. The GPS antenna portion has excellent LHCP rejection for less multi-path effects, and it includes a low noise amplifier and a narrow band SAW filter, to provide a consistent and clear GPS signal while minimizing loss-of-lock when GPS conditions are less than ideal. The Quad Cell/3G/2.4 GHz antenna portion is tuned to receive 824-894 MHz (cell), 890-960 MHz (GSM), 1710-1880 MHz (European), and 1850-1990 MHz (N. American), as well as 1885-2200 MHz (US & Euro 3G/UMTS/W-CDMA) and 2400-2500 MHz (2.4GHz ISM) frequencies.

Featuring a custom designed high performance GPS patch element, a quad-band Cell, a 3G and a 2.4GHz band antenna in an ultra-thin design. The EXC3947's compact and efficient design combines the power of GPS, Quad Cell, 3G and Broadband Wireless technologies within one antenna, thereby maximizing your installation options. This antenna is the perfect solution for cutting-edge TELEMATICS platforms.

Applications

- GPS, Quad Cell, 3G & 2.4 GHz Applications
- M2M: WiFi, ZigBee and Bluetooth and proprietary 2.4 GHz Applications
- Security and Law Enforcement
- Automotive Navigation
- Fleet Management & Telematics
- Asset Tracking Systems
- Covert or Dash Mount Installation

Model # EXC3947 Technical Specifications

Environmental Specifications	temperature	-40c to +85c operating
	dimensions	132.1mm x 58.9mm x 8.5mm height (2.05" x 2.32" x 2.52" height)
Mechanical	housing	Lexan® covered urethane foam
	cable	1.5 DS-QEHV Shikoku DUAL Cable
	cable lengths	2 cables x 3 Metres (Standard), other lengths optional
	cable loss	1.0 dB/m typical
Antenna Response (GPS)	connector	2 x SMA (other connectors available)
	frequency	1575.42 MHz
	gain (typical)	28 dB
	noise figure	1.5 dB
	polarization	Right Hand Circular
	LHCP rejection	> 6 dB
	VSWR	<= 1.5:1
	voltage	3.0 - 5.0 VDC
	current (typical)	9.0 mA @ 3.5VDC
	frequencies	824-894 MHz (Cellular) 890-960 MHz (GSM) 1710-1880 MHz (Europe) 1850-1990 MHz (N. America) 1885-2200 MHz (US & EU 3G) 2400-2500 MHz (2.4GHz ISM)
Electrical (Cellular/3G/2.4GHz)	output impedance	50 Ohm Nominal
	VSWR	<= 2.0
	gain	2 dBi (approx.)

EXC 1857

Ultra Compact Embedded GPS Antenna

Features

- 2.7 to 5 V operation
- Available with built-in ground plane
- Optional cable types and lengths available
- Other connector types available
- Ideal for embedded applications
- Low price



EXC1857 18 mm x 18mm x 7 mm Very Compact Embedded GPS Antenna

The Very Compact EXC # 1857 Embedded GPS antenna is ideal for GPS Enabled mobile phones, PDAs, laptops and portable GPS Handhelds. The EXC1857 antenna features a 18 mm x 18 mm x 4 mm ceramic patch element, ESD circuit protection, a two stage low noise amplifier and a SAW filter, enabling the EXC # 1857 to provide great out-of-band signal rejection performance, consistent and clear signal while minimizing loss-of-lock in a very small form factor. With its very compact 18 mm x 18 mm x 7 mm dimensions, the EXC # 1857 antenna is perfectly suited for OEM applications.

Designed for easy integration into OEM handheld platforms, the EXC # 1857 antenna integrates a highly robust ESD protection circuit, a two-stage low-noise amplifier to ensure a reliable and clear signal for the GPS receiver even in difficult conditions, as well as a SAW filter for even greater performance for hand held telematics applications where out-of-band signal rejection is required.

Applications

- GPS Enabled Mobile Phones, PDAs & Laptops
- Portable GPS Handhelds
- GPS enabled M2M
- Military and Law Enforcement Radios
- GPS Enabled Offender Monitoring Systems
- Asset Tracking Equipment
- Automotive & Marine Navigation Systems

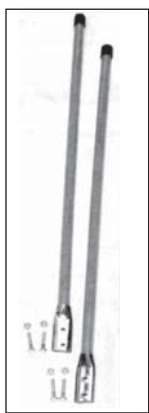
EXC # 1857 Technical Specifications

Environmental Specifications	temperature	Operating: -40c to +85c (-45c to +85c storage)
	humidity	95% max (non condensing)
	dimensions	18 mm x 18 mm x 7 mm Vertical axis 50G Other axes 30G
Mechanical	shock	3 axis, sweep = 15 min 10 - 200 Hz log sweep: 3G
	vibration	1575.42 MHz 1 dBic
	frequency gain	2.7 - 5 VDC 15 mA @ 5V, 9 mA @ 3.3V
Antenna Response	polarization	Right Hand Circular @ 90° 4 dB @ 20° 6 dB
	axial ratio	2.7 - 5 VDC
	voltage current	15 mA @ 5V, 9 mA @ 3.3V
	connector	Right angle MCX, other connector types available
Electrical	cable	Shikoku Coax Cable p/n 1.5QEHV(TA)
	cable length	15 cm (6"), other lengths available
	frequency	1572.5 - 1578 MHz
	output impedance	50 Ohm
	VSWR	1.5:1 max (at connector) @ 3.3VDC: 28 dB (typical) @ 5VDC: 30 dB (typical)
	gain	1.5 dB (typical) +/- 15 MHz: 5 dB +/- 20 MHz: 10 dB +/- 30 MHz: 32 dB +/- 40 MHz: 40 dB
LNA Specifications	noise figure	
	out-of-band rejection	

Rookie Poles

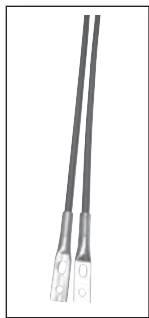
This extra heavy duty marker designed for highway municipal plow requirements. The 3/4" OD tube is constructed of flexible but strong plastic material available in 28", 36", and 48" lengths offers greater visibility than conventional markers.

- When safety is a must
- Sold in pairs
- Safety orange and fluorescent yellow colors available
- Use on plow blades, truck bumpers and trailers
- RP series 3/4" diameter .125 wall thickness
- HRP series 3/4" diameter heavy duty "Top of the line"



MODEL

- RP-28 28" Fluorescent Orange
- RP-36 36" Fluorescent Orange
- RP-48 48" Fluorescent Orange
- HRP-28 28" Fluorescent Orange
- HRP-36 36" Fluorescent Orange
- HRP-36Y 36" Fluorescent Yellow
- HRP-48 48" Fluorescent Orange



MODEL

MRP-26.5
Fire engine Red 26-1/2" Snow blade poles, with flexible steel cable/metal core material, very durable, heavy duty mounting base. 2 year warranty. A O.E.M. favorite, fits most blades. (Sold in pairs)

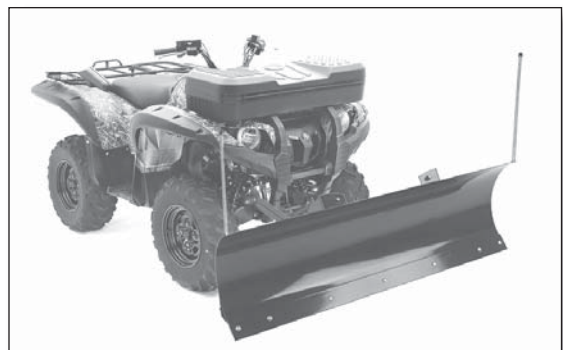


MODEL

- MF-24 Meyers Rookie Pole
- WF-24 Western Rookie Pole



- **Threaded rod rookie poles are the ideal solution for fire-hydrant applications.**
- **Low cost**
- **Very efficient**
- **Durable to handle all weather elements**



MODEL

- TRP 28-3/4 28" Threaded Rod Rookie Pole
- TRP 36-3/4 36" Threaded Rod Rookie Pole
- TRP 48-3/4 48" Threaded Rod Rookie Pole

End Type 3/4" Dia. 28" - 36" - 48" Sold In Pairs

*Also Available: Custom mounting brackets to fit threaded rookie poles

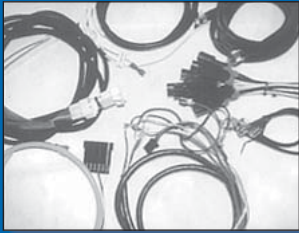
Stainless Steel Bumper Guides

Cota Engineering Capabilities

Designing the products that meet your needs and specifications is the mission of our engineering departments Cota's automotive division and Cota's manufacturing plants. Our engineers welcome the opportunity to work from your sketches, product renderings, or CAD drawings to meet the challenges of transforming your ideas from prototypes to full production.

OEM Cable and Wire Harness

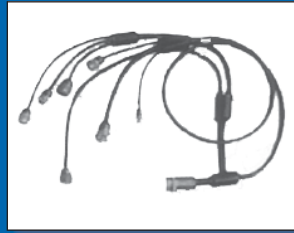
CABLE HARNESS ASSEMBLIES



Using only the highest quality cable and components and the most advanced manufacturing equipment and tooling, we are manufacturing and marketing the widest range of custom cable assemblies and electromechanical harnesses:

- Automotive Harnesses
- Custom Medical Cables
- Custom Instrumentation Cables
- Industrial Ethernet Cables
- Security/Access, CATV Cables
- Cellular/Wireless Antenna Cables
- Twinax, Coax, IBM cabling system
- 25-pair Telco
- USB Cables
- T1/E1, T3/E3 Communications Cables
- Power Cables, Flat power bus
- Speciality / Custom Specified Cables

MOLDED CABLE ASSEMBLIES



Cable Design, Cable Engineering, Prototyping, Connector Molding, Embedded Circuitry, Strain Reliefs.

We specialize in molded cable assemblies and wire harnesses, built to customer specifications. We have established ourselves as the leader in quick turn-around, low volume, and high mix cable production. We provide domestic, US based manufacturing and over-molding at very competitive pricing. This includes complete products manufactured to your specification or "molding only" with our customers material or assembly.

Cota International, Inc. is a premier manufacturer of Antennas, Mounting Hardware, Metal Stampings, Cable & Wiring Harnesses. Cota is pleased to introduce new products for the Agriculture, Construction, Truck and RV industry with AM-FM, TV, Commercial, GPS Antennas and Accessories. With over 35 years of manufacturing expertise, Cota International has concentrated and focused on the personal communication markets, Heavy-Duty Truck, Class 5,6,7 and 8; as well as within the Specialty Automotive, Agriculture, Construction, and RV industry.

Through Coat International's worldwide network of partners and strategic alliances, we offer our customers a broad base of resources, capabilities and technology. Cota International is quick to react and responds immediately to changes and demands of ever changing market needs.

Factories located in China and New Delhi, India keep us competitive. All factories are ISO 9002 Certified to deliver you top quality parts. Parts are then warehoused in Versailles, Ohio.

Cota International accomplishes exceptional quality with state-of-the-art test equipment, precise engineering and stringent quality assurance throughout production of our product lines. You can be rest assured, consistency is a high priority with all products manufactured by Cota International.



EXCALIBUR

HEAVY-DUTY PROFESSIONAL PRODUCTS



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