ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501, USA . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com

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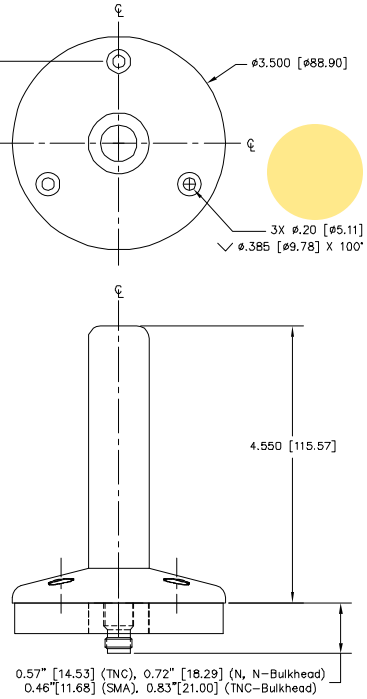

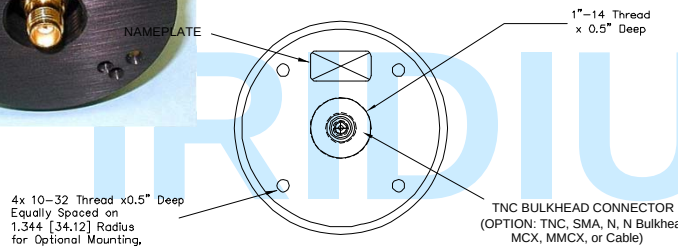

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS

ELECTRICAL:

FREQUENCY (MHz):	(1575.42±15)	(1542.50±17.5)	(1642.50±17.5)	(1602-1616)	(1610-1626)	(1227.60±15)
GAIN (dBic) in FS/4ft GP	L1 GPS	Rx INMARSAT	Tx INMARSAT	GLONASS	IRIDIUM	L2 GPS
@ 90° (Zenith):	+1.1/+3.7	+0.7/+1.5	-0.3/0.0	+0.5/+2.9	+0.1/+1.1	-5.0
@ 10° Elevation:	-0.9/+0.0	-1.6/-1.3	-1.9/-1.0	-1.3/+0.2	-1.6/-0.8	-6.5 to -11.5
@ 20° Elevation:	-0.2/+2.0	-0.8/+1.0	-1.1/+1.2	-0.5/+2.4	-0.8/+1.2	-6.2 to -9.2
@ 30° Elevation:	+0.3/+2.0	-0.2/+1.0	-0.8/+0.4	+0.1/+2.1	-0.7/+1.1	-5.7 to -7.7
@ 45° Elevation:	+0.6/+1.5	+0.3/+0.6	-0.7/-0.8	-0.1/+1.0	-0.3/-0.3	-4.6 to -6.0
@ 70° Elevation:	+0.3/+1.3	+0.3/+0.4	-1.6/0.0	-0.3/+1.1	-0.7/0.0	-4.0
BEAM WIDTH (3dB)	173/155 Deg.	173/155 Deg.	180/162 Deg.	180/162 Deg.	180/162 Deg.	(107 to 170) Deg.
AXIAL RATIO (dB)	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 5
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP					
VSWR:	< 1.5:1					
DC GROUNDING	YES (LIGHTNINGPROTECTION)					

MECHANICAL:

SIZE:	DIAMETER = 3.50 in.[88.90 mm] HEIGHT = 4.690 in. [119.13 mm]
WEIGHT:	11 oz. (314 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
COLOR:	GLOSS WHITE #17925 PER FED-STD-595B LUSTERLESS GRAY #36320 PER FED-STD-595B OLIVE DRAB GREEN #34031 PER FED-STD-595B LUSTERLESS BLACK #37038 PER FED-STD-595B
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, AND SKYDROL RESISTANCE, FIRE RETARDANT
CONNECTOR:	TNC BULKHEAD CONNECTOR, (OPTION: TNC, SMA, N, N Bulkhead, MCX, MMCX, or Cable)
MOUNTING:	FLAT, OR FIXED PIPE (3/4"-1.0" Dia.) MOUNT (PROVIDED)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEALED

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	ITEM NO
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	5
1				4
1	ADHESIVE GASKET	12345G-3M-3G	-	3
1	VERTICAL/HORIZONTAL ANTENNA MOUNT	MTR-2		2
1	OPTIONAL VERTICAL ANTENNA MOUNT	MTR-1	-	1

PARTS LIST

CONFIGURATION:	POLARIZATION:	LNA :	CABLE'S LENGTH :	CONNECTOR :	COLOR :
1: 2" SQ. (FLAT)	LL: TX: LHCP, RX: LHC P	A1: WITH +34 dB LNA	M14: 1-14" Thread Mount	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	LR: TX: LHCP, RX: RHC P		X: NO CABLE	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	RL: TX: RHCP, RX: LHC P	P: WITHOUT LNA	M: WITH MAG. MOUN T	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)	RR: TX: RHCP, RX: RHC P		#: CABLE LENGTH (IN)	T: TNC; TB: TNC- Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)			R: RIGHT ANGLE CON.		
S3: (HELIX ROD)					
SB: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

NOTES: UNLESS OTHERWISE SPECIFIED:
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
2. ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

P/N: S53IR16RR-P-M14TB-1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .005 ANGLES ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R .030 TO R .032
SCREW THREADS PER MIL-S-8879
DIA'S ON A COMMON ℄ ø.003
MACHINED SURFACES 125√
DO NOT SCALE DRAWING

DRAWN
CHECKED
ENGINEER
APPROVED S. HUYNH DEC-03-03
CAD FILE NO

ANTCOM CORP. TORRANCE CALIFORNIA

1-14 PIPE MOUNT, IRIDIUM/GPS/GLONASS/ INMARSAT HELIX ANTENNA

SIZE	CAGE NO	DRAWING NO	REV
D	3CVE1	S53IR16RR-P-M14TB-X	—

SCALE 1/1 SHEET 1 OF 1

ORIGINAL DOCUMENT WITH STAMP IS RED

NMO Connector Option is Now Available for Some Antennas