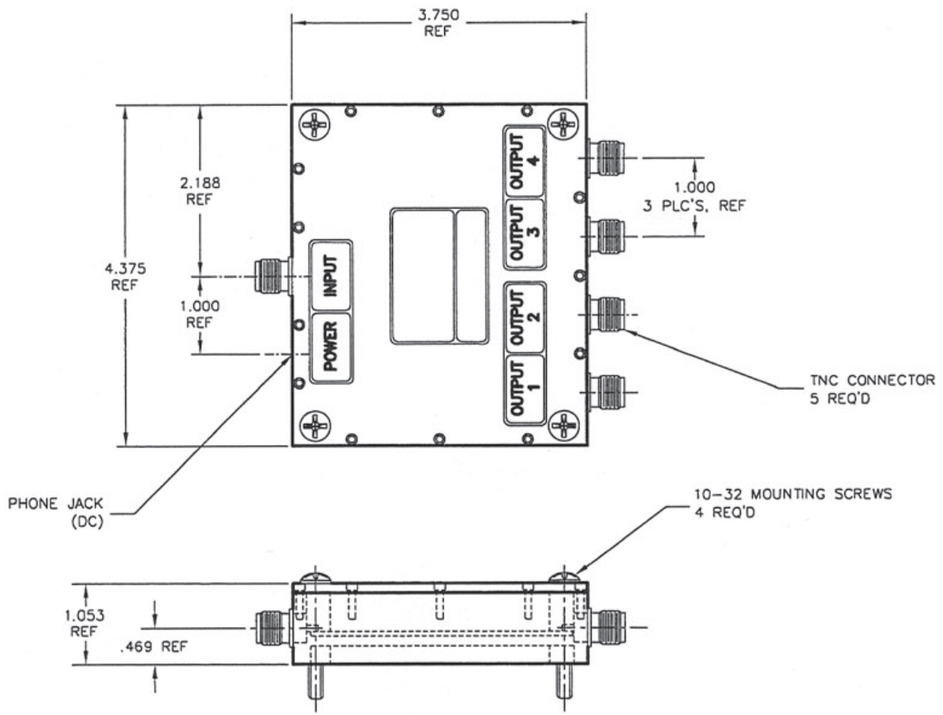
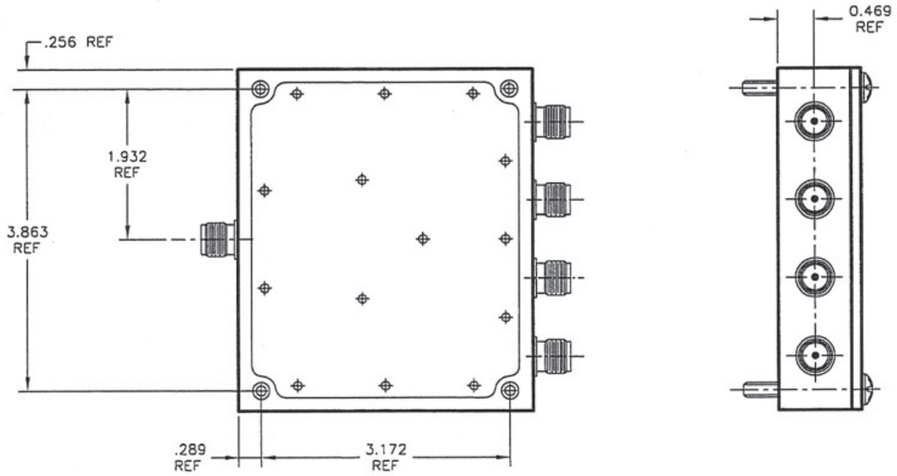
REVISIONS				
LTR	DESCRIPTION	EFFECTIVITY	DATE	APPD





NOTES: UNLESS OTHERWISE SPECIFIED

SPECIFICATIONS

ELECTRICAL

FREQUENCY	L1 1575.42 ± 10 MHz L2 1227.6 ± 10MHz
VSWR	≤ 2.0 : 1
IMPEDANCE	50 Ω
ISOLATION (OUTPUT-OUTPUT)	15.0 dB
GAIN	35 ± 5 dB
VOLTAGE	4 TO +24 VDC
CURRENT (MAX)	65 mA

MECHANICAL

WEIGHT	
HEIGHT	1.053 INCHES (27 mm)
LENGTH	4.375 INCHES (111.2 mm)
WIDTH	3.750 INCHES (95.3 mm)
FINISH	SKYDROL RESISTANT ENAMEL GLOSS YELLOW PER FED-STD-595 #13655
MATERIAL	ALUM 6061-T6
CONNECTOR	TYPE "TNC"

ENVIRONMENTAL

TEMPERATURE	-55°C (-67°F) TO +85°C (+185°F)

PRELIMINARY
NOV 01 2004
UNCONTROLLED DOCUMENT

-1	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL OR NOTE	UNIT WT	Z	ITEM NO.
REQD PER ASSY			LIST OF MATERIALS					

UNLESS OTHERWISE SPECIFIED
ANGULAR TOLERANCE ±
LINEAR – HUNDREDTHS ± .030
THOUSANDTHS ± .010

ON SHEET METAL PARTS:
ALL BEND RELIEF & INSIDE CORNER RADII .16. OUTSIDE CORNERS .22 RADIUS OPTIONAL. THESE ARE MINIMUM ROUTER REQUIREMENTS.
ALL BEND RADII _____

✓ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

FABRICATE PER MANUAL OF STANDARD SHOP PRACTICES No. _____

	NAME	SIGNATURE	DATE
DRAFTSMAN			02-20-98
CHECK			8/3/01
PROJECT ENGR			
MECH			8/6/01
MECH			
ENGR OFFICE			8/3/01
Q.C.			8/3/01
APPROVAL			
APPROVAL			

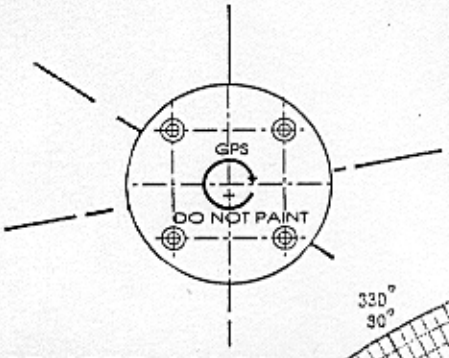
Sensor Systems inc. Chatsworth, California 91311

TITLE
OUTLINE DRAWING
GPS RE-RADIATION SYSTEM

CODE IDENT NO.	SIZE	NO.	REV
13691	D	S67-1575-1000	

SCALE 1:1 | 0-1000 #4 SA 08-03-01 | SHEET 1 OF 1

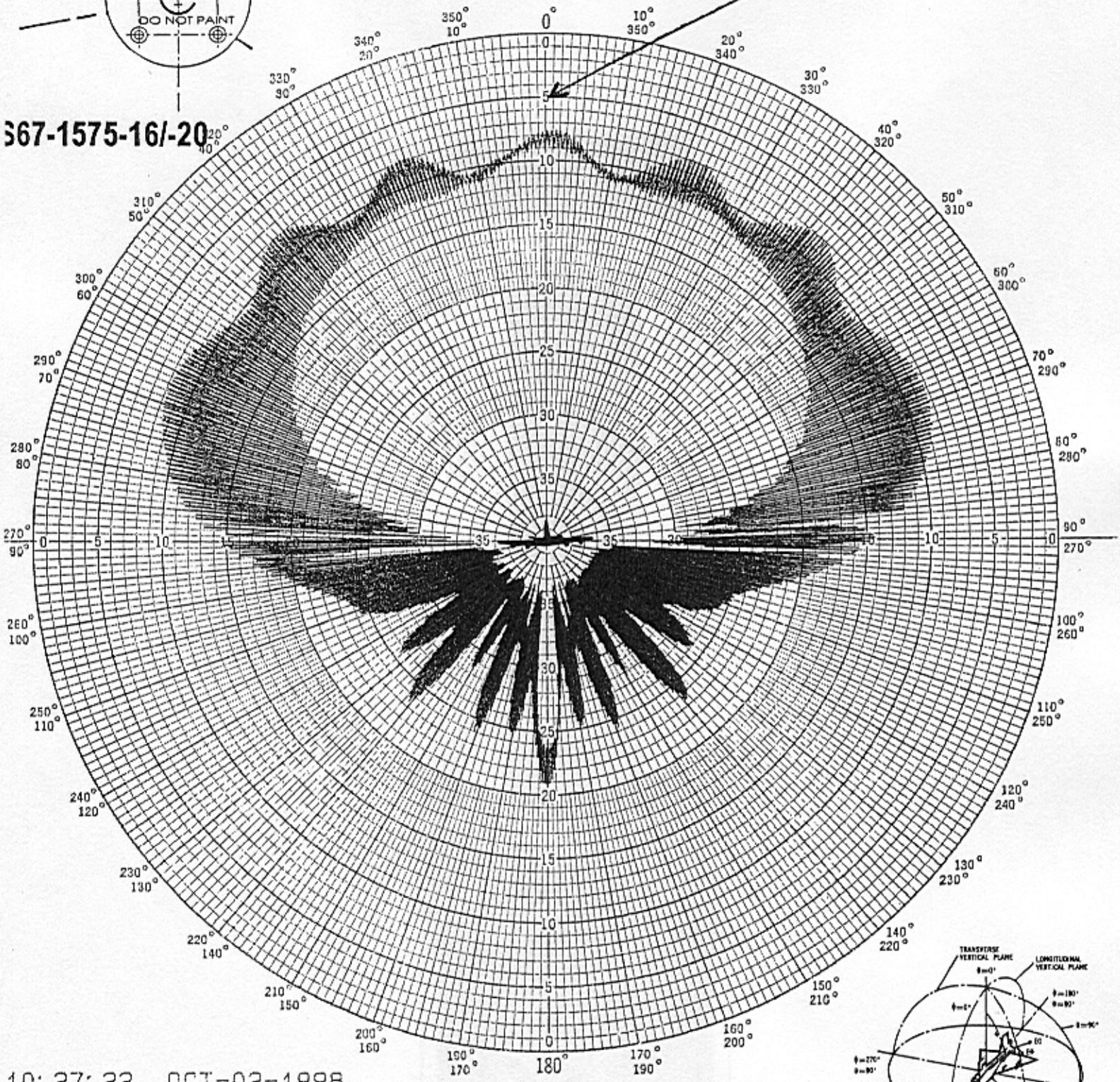
PART DASH NO.	NEXT ASSY	USED ON	NEXT ASSY	FINAL ASSY
	APPLICATION		QTY REQD	



Sensor Systems Inc.

REF GAIN +5 dBi dBi

S67-1575-16/-20



10: 27: 22 OCT-02-1998

PROGRAM Gain & Pattern Test
ANTENNA TYPE S67-1575-16/-20
SERIAL NO.
TEST LOCATION Anechoic Chamber #1
GROUND PLANE TYPE
OPERATOR
PROJECT ENGINEER
QUALITY ASSURANCE

FREQUENCY 1575.42MHz
POLARIZATION, E_θ E_ϕ
MODEL SCALE FULL
GAIN +5dBi
REF. ANTENNA
REMARKS

A56575

GPS S67-1575-Series

L1

DESCRIPTION

S67-1575-20: L1 GPS antenna operating at 1575.42 MHz. Spherical radius molded radome provides enhanced protection against rain, ice and lightning strikes. Application for airborne, marine, ground vehicles and manpack installation.

S67-1575-39: Same as (-20) except preamplifier/filter assembly. Internal 26 dB gain amplifier requires +4 to +24 VDC which is provided through the coaxial connector. Height .57 inches.

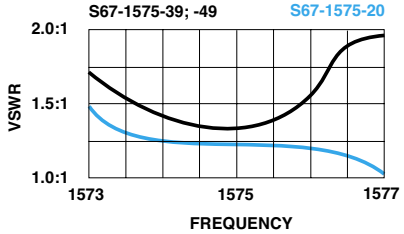
NSN: 5985-01-441-5048

S67-1575-49: Same as (-39) except 40 dB gain preamplifier. Height .60 Inches.

S67-1575-59: Same as (-49) except 13 dB gain preamplifier.

FEDERAL & MILITARY SPECS: FAA TSO C115a and C129, DO-160, MIL-STD-810, MIL-C-5541, MIL-E-5400.

PERFORMANCE



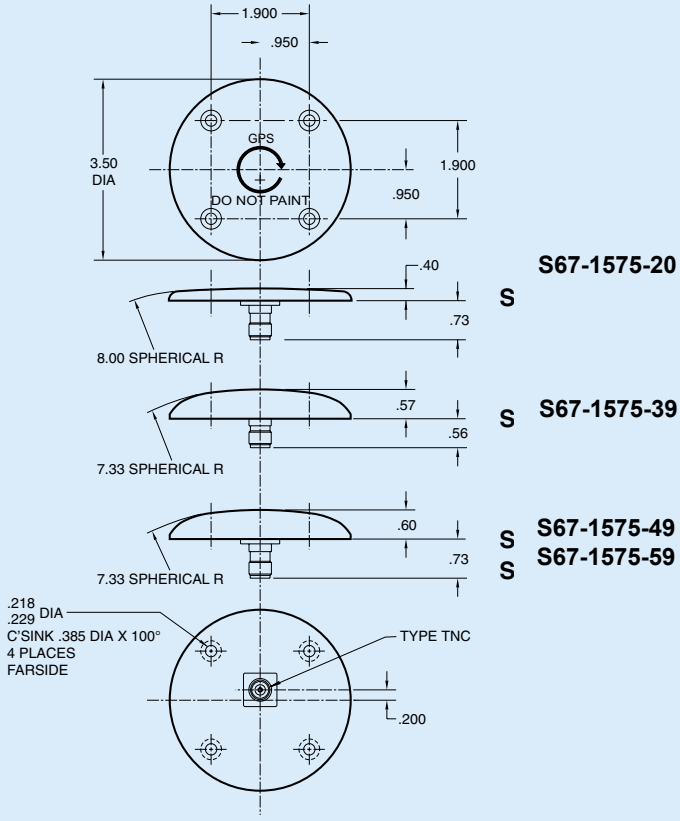
1575 MHz
L1

RADIATION PATTERN

SPECIFICATIONS

	S67-1575-20	GPS S67-1575-39	S67-1575-49 S67-1575-59
ELECTRICAL			
Frequency	1575.42 MHz	1575.42 MHz	1575.42 MHz
VSWR	1.5:1	2.0:1	2.0:1
Polarization	RHCP	RHCP	RHCP
Impedance	50 ohms	50 ohms	50 ohms
Antenna Gain (Typ)	3 dBic @ Zenith		
Gain Coverage (min)	-1.0 dBic 0° ≤ θ ≤ 75° -2.5 dBic 75° < θ ≤ 80° -4.5 dBic 80° < θ ≤ 85° -7.5 dBic θ = 90° @ Horizon		
Gain (preamp)	—	26.0 dB	40.0 dB (-49) 13.0 dB (-59)
Noise Figure	—	2.8 dB	2.8 dB
Power Handling	1 watt	1 watt	1 watt
Voltage	—	+4 to 24 VDC	+4 to 24 VDC
Current	—	25 mA	45 mA
Lightning Protection	DC grounded		
MECHANICAL			
Weight	3 oz.	5 oz.	5 oz.
Height	.40 in.	.57 in.	.60 in
Width	3.5 in.		
Material	6061-T6 aluminum / thermoset plastic		
Finish	Skydrol resistant enamel		
Connector	TNC		
ENVIRONMENTAL			
Temperature	-67°F to +185°F		
Vibration	10 G's		
Altitude	55,000 ft.		

OUTLINE DRAWING



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