M4HCT-22-P
PASSIVE GPS GLONASS GALILEO BEIDOU ANTENNA

Ordering Part #: 108-00073-04

Description

The M4HCT-22-P is a high-performance passive antenna designed for the GPS L1, GLONASS, Galileo and Beidou bands, and built on proprietary Helicore® technology. This technology provides exceptional pattern control, polarization purity, and high efficiency in a very compact form factor. The M4HCT-22-P is designed for embedded applications and features an integrated 3-pin connector. This product is designed for applications requiring high-quality reception of GPS, GLONASS, Galileo and Beidou signals. The ultra light design weighs only 2 grams making this antenna ideal for the most demanding, mechanically constrained platforms including handheld devices, asset tracking, seismic recording instruments, and many more.

Features

• GPS, GLONASS, Galileo, Beidou bands
• Very low axial ratio
• Easy integrate 3 pin connector
• Ultra lightweight - 2 grams
• Ground plane indepedent

Applications

• Vehicle and fleet tracking
• Military & security
• Asset tracking
• Seismic recording instruments
• Oil & gas industries
• Navigation devices
• Mining equipment
• LBS & M2M applications
• Handheld devices

Electrical Specifications*

Parameter	Design Specifications
Frequency	1575 MHz (GPS)
	1602 MHz (GLONASS)
	1561 MHz (Beidou)
	1176.45 MHz (Galileo)
Polarization	RHCP
Antenna element peak gain	-0.5 dBic (typical)
Efficiency	25% (typical)
Bandwidth (-1dB)	(-5 dB) 50 MHz (typical)
Axial Ratio	1 dB (typical) / 1.5 dB (max)
VSWR	1.5 (max)
Impedance	50 Ohm
Operating temp.	from -40˚C to 85˚C
RF connector	3 Pin OR U.FL
Weight	2 grams

* Declared peak gain and reported radiation pattern are intended for a rotationally symmetrical plastic radome.
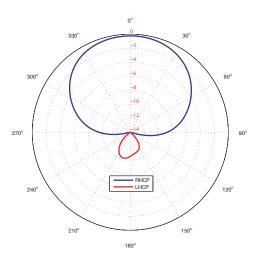
Realized gain plot
Measured at 1575 MHz

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MAXTENA
WIRELESS INNOVATIONS COMPANY

12.8 ±0.3
ACROSS THE SEAM

26.9 ±0.3

22.75 ±0.30

5.50

Ø14

2.54

1.45

12.55

A

1.50   3X0.50

2.2 ±0.3

DETAIL A

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM
TOLERANCES:
FRACTIONAL±
ANGULAR: MACH ± .5° BEND ±
INTEGER ±2
ONE PLACE DECIMAL ± 1.0
TWO PLACE DECIMAL ± .50
INTERPRET GEOMETRIC
TOLERANCING PER:

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	QZ	2020-02-02
CHECKED	ZX	2020-02-04
ENG APPR.	NPC	2020-02-04
MFG APPR.		
Q.A.		

CAD MAINTAINED.
CHANGES SHALL BE
INCORPORATED BY
THE DESIGN ACTIVITY.

MAXTENA, INC

TITLE:
108-00073-04
M4HCT-22-P, GPS/GLONASS/
GALILEO/BEIDOU

SIZE **B**

DWG. NO.
117-00399-04

REV **A**

CAGE CODE: 5KQH7   SCALE: NONE   SHEET 1 OF 1