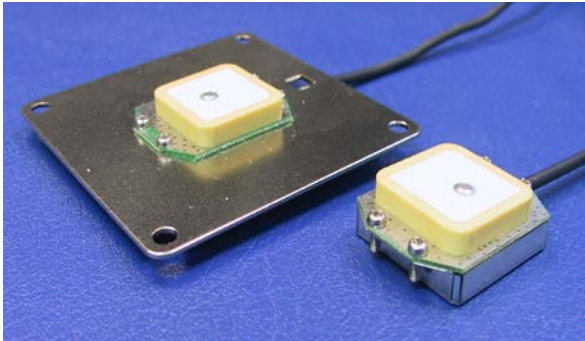# AN-10S Active GPS Patch Antennas

Introduction:

The AN-10S active patch antennas replace the extremely popular SA-50 antennas while adding improved performance. The AN-10S antennas feature an LNA with 3 dB higher gain than the SA-50 in addition to a ceramic filter, greatly enhancing GPS receiver performance in areas of weak satellite signals and RF interference.

Physical Characteristics:

The AN-10SA includes a 76mm square ground plane with four 5mm holes for easy mounting. The AN-10SC has a conformal shield can for minimum size. The four M2.5 screws that secure the shield to the LNA circuit board may also be used for mounting the antenna.
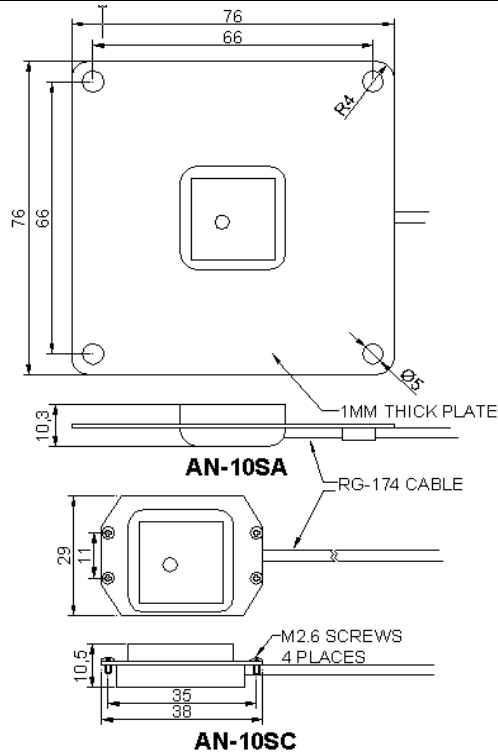
Specifications:

PHYSICAL CHARACTERISTICS	
AN-10SA	76mm x 76mm x 10.3mm 45 grams (excluding cable)
AN-10SC	29mm x 38mm x 10.5mm 20 grams (excluding cable)

ENVIRONMENTAL CONDITIONS	
Temperature	Operating: -30ºC to +85ºC Storage: -40ºC to +90ºC
Humidity	95%, non-condensing

LOW NOISE AMPLIFIER	
Center Frequency	1575.42 MHz
Power Gain	+28 dB typical
Filtering	-20 dB minimum at Fo +/- 50 MHz
Supply Voltage Range	+2.5 - +5.5 VDC
Current Consumption	12mA typical at +3.0 - +5.0 VDC
Output Impedance	50 ohms

OVERALL PERFORMANCE (patch, LNA, and 5m cable)	
Center Frequency	1575.42 MHz
Power Gain	+26 dB typical
Filtering	-20 dB minimum at Fo +/- 50 MHz
Noise Figure	2.0 maximum
VSWR	2.0 maximum
Output Impedance	50 ohms

AN-10SA

AN-10SC

ANTENNA MODELS	PART NUMBER
AN-10SA, 5m cable, straight MMCX plug	10001367
AN-10SA, 5m cable, right angle MMCX plug	10001368
AN-10SA, 6m cable, straight SMA plug	10001454
AN-10SC, 5m cable, straight BNC plug	10001601
AN-10SC, 5m cable, straight SMA plug	10001802

Many other cable/connector options are available

Call or email us for details

For configuration assistance, order placement and technical support call:

SYNERGY SYSTEMS, LLC
Time proven products and support

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