

# Precision GPS Antennas

Hemisphere GPS' A52 and A21 are two new antennas adding precision, reliability, and value to the Crescent and Eclipse GPS technology.

A52 is a multi-GNSS (GPS L1/L2/L5, GLONASS L1/L2, Beidou, SBAS, OmniSTAR, and Galileo E1/E5a and b) precision antenna that is ideal for various applications including post-processed geodetic surveys, RTK positioning and navigation, precise guidance, and machine control. A52 can be used in challenging environments (such as near buildings and foliage) as it has superior multipath mitigation, a stable phase center, and strong SNRs even at low elevations.

A21, already used for aerial application guidance and flow control but now available for precise mapping and surveying, receives GPS L1, SBAS, and OmniSTAR L-band signals. The A21 antenna is designed to maintain its tracking of GPS and differential correction signals in high electrical "noise" and interference environments and in dynamic applications where the antenna may be turned on its side.

Both the A52 and A21 feature a rugged enclosure with an IP69K environmental rating, a metal base and 5/8 inch threaded connectors for secure mounting to survey poles, tripods, vehicle mounts and more. A52 includes both right angle and straight TNC connectors for pole or flush mounting and A21 includes a straight TNC connector. The U.S. National Geodetic Survey (NGS) has published the antenna calibrations for A52 and A21. The antennas wideband cross-dipole design technology is the basis of two pending Hemisphere GPS patents.