



Strong anti-interference ability adaptive to star GPS / BDS / GNSS antenna array small volume light weight installation simple multi-format expansion

Product Description

As a general positioning and navigation system, GPS system is getting more and more attention because of its incomparable advantages. Especially with the global popularization of UAV, the dependence on GPS positioning and navigation is increasingly obvious; in the application confrontation in many hot spots, the application of UAV has the demand of interference and anti-interference. When the satellite signal reaches the ground user receiver, it is quite weak (about -130 dBm), the weak interference may cause the GPS receiver to reduce the system accuracy to work normally and lose the navigation ability. GPS anti-jamming technology has become a key problem to be solved in the practical application of satellite navigation receiver in special industries.

For a GPS receiver to receive high quality satellite signal, it must get high quality reception gain, and eliminate interference from other signals as possible.

main features

- ◆ Adaptive antenna array: four L1 \ B1 GPSBDS adaptive antennas are used to form an array, and the adaptive filter adaptive antenna is aligned with the satellite source
- ◆ Small volume and light weight: low section, small size anti-interference ceramic antenna array, small volume, light weight, conducive to installation, small bearing ratio
- ◆ Adaptive signal processing: automatically control the antenna array to adjust the parameters and direction, keep the main antenna beam opposite to zero finger, strong anti-interference ability
- ◆ High inhibition and strong anti-interference: high inhibition characteristics, single interference three interference, strong anti-interference ability
- ◆ Low noise playback, low elevation angle and high gain: good polarization between the antenna unit characteristics, with low noise playback, high gain, stable performance
- ◆ Small mutual coupling between antenna array array: with multi-stage anti-interference module technology to the receiver end, effectively against the pulse sweep interference equipment
- ◆ Simple installation and application: integrated design, only need to replace the original machine GPS antenna interface, the original machine 9-36V wide voltage power supply can be applied
- ◆ Support multi-system expansion: in addition to supporting GPS-L1 \ BDS-B1 segment application, L2 / L5 and GL ONASS G1, BDS-B2 and GALILEO systems can be expanded
- ◆ Customized design: provide customized design scheme according to different satellite systems in multiple regions of the world
- ◆ All localization: all chips are designed and applied in localization, and the MPGA kernel is developed independently

system parameter

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service frequency	GPS-L1/:1575.42±1.023MHz \GLONASS G1:1575.42±16MHz \GAL-E1: 1575.42±	
Scalable	GPS-L 2:1227.60MHz , L5:1176.45MHz ,GLONASS L2:1602.5MHz , GAL-E5:	
Quantity of	4 array ceramic antennas	
direction of	Horizontal polarization of the cells 360 ⁰	
standing-wave	≤1.5dbi	
Horizontal	360°	
Antenna isolation	>20dbm	
Signal input	-130~-60dBm	
Broadband	+/- 1.5db	
noise factor	≤1.5db	
capacity of	L1 / B1:90dB for one dry and 80dB for three dry	
gain (center frequency)	Center G1 unit	Maximum value of 3 dbi
	The elevation	≥-2.0dbi
	Surrounding unit	Maximum value of 2.0 dbi
	The elevation	Maximum value of 4.0 dbi
blankering	≥40db (±50MHz)	
power supply	DC INPUT:9-36v	
Power	≤4W	
Seismic	10-55Hz,1.5mm The amplitude is present at 2 hours without deviation	
Heat dissipation	conduction of heat	
The highest limit	≤5000M	
device interface		
Antenna	SMA-K、J30J-9ZK	
physical index		
Equipment size	L130 W130 H34mm (excluding tolerance)	
weight of	165g (including enclosure enclosure)	
levels of	IP 31	
Operating	-40℃ ~ + 65℃ 95% non-condensing	
Environmental	Through lead-free certification	

Size diagram

