7-6008 DACU8

CHELTON

Anti-Jam GPS DACU (8-Channel)

Key features:

- Fully M-Code Compatible
- Excision narrowband interference protection
- STAP nulling broadband interference protection
- Ultra-low Latency of 29.36µs
- In use on US Army Gray Eagle

The Anti-Jam GPS DACU (Digital Antenna Control Unit), Type 7-6008, is an 8 channel GPS anti-jamming processor for use with an active controlled reception pattern array (CRPA).

The DACU mitigates narrow-band interference, using an excision process, and broadband interference by creating directed nulls in the antenna pattern. These techniques provide significant antijam protection even in highly dynamic, multi-jammer environments.

Chelton is able to provide a complete anti-jam solution for the platform. Installations can make use of a variety of CRPA options and cabling lengths, to best suit the form factor requirements of the platform. The DACU interfaces the antenna array to the GPS receiver.



The DACU is designed for size and weight constrained platforms, such as small airborne and unmanned installations. The DACU includes the ability to determine the direction of multiple spatially separated jammers with an accuracy of better than 5 degrees when the system is calibrated to the aircraft platform.



7-6008 DACU8

CHELTON

Anti-Jam GPS DACU (8-Channel)

ELECTRICAL

Power Consumption	< 42 W
Input Voltage	28 V dc nominal (+ 18 V to +32 V)
Noise Figure	< 4.5 dB (with 20-7009 CRPA)
Gain	> 29.5dB
Connectors	
Connectors RF In (J1-J8)	SMA Female (8 off)
	SMA Female (8 off) TNC Female
RF In (J1-J8)	` '

MECHANICAL

Height	131 mm (5.16")
Width	97 mm (3.82")
Length	257mm (10.12")
Max Weight	2.06 kg (4.54 lbs)
Mounting	4 holes fixed location

ENVIRONMENTAL

High Temperature	MIL-STD-810G, Method 501.5, 502.5, 500.5, 507.5 Operational: +71°C
Low Temperature	MIL-STD-810G, Method 501.5, 502.5, 500.5, 507.5 Operational: -40°C
Altitude	MIL-STD-810G, Method 501.5, 502.5, 500.5, 507.5 25,000 ft (maximum)
Rate of Climb and Descent	MIL-STD-810G, Method 500.5 Max rate: 10 m/s
Waterproofness	MIL-STD-810G, Method 506.5, Procedure III, Drip Test
Salt Fog	MIL-STD-810G, Method 509.5
Acceleration	MIL-STD-810G, Method 513.6, Proc I
Vibration	MIL-STD-810G, Method 514.7, Proc I, Annex D, Cat13 (Propeller Aircraft) MIL-STD-810G, Method 514.7, Proc I, Annex D, Cat14 (Helicopter)
Shock	MIL-STD-810G, Method 516.6, Procedures I and V Operating: 20 g Crash Hazard 40 g
ЕМС	MIL-STD-461F CE101,CE102,CE106, RE101,RE102 CS101,CS114,CS115,CS116 RS101,RS103

