

# VIAVI

## GC-130

### GPS Antenna Coupler

Designed to solve the problem of poor GPS coverage in hangar environments or when a simulated static or dynamic GPS signal is required.

The VIAVI GC-130 GPS Antenna Coupler provides >20 dB of antenna isolation, ensuring outside GPS signals are not seen by the aircraft's GPS receiver when simulating a user defined GPS signal. The coupler mounts directly over the aircraft's GPS antenna.

The GC-130 accommodates the large pattern antennas (up to 14" in diameter) and Controlled Radiation Pattern Antenna (CRPA) used on anti-jam GPS systems, unlike the smaller coupler that is included with the VIAVI GPSG-1000 GPS Simulator. These types of antenna are typically used on military and high performance aircraft that require GPS navigation and anti-jam capability.



#### Features

- Provides >20 dB of antenna isolation
- <1 dB repeatability
- Supports GPS antennas up to 14 inches in diameter
- Rugged design for ramp use

#### Benefits

- Reliable GPS simulation in hangars and other low coverage areas
- When used with the GPSG-1000 GPS Simulator:
  - Almanac and TOD update when no outside GPS signal is available
  - Sensitivity testing of the GPS system
  - Dynamic GPS simulation to simulate aircraft movement for testing of other aircraft systems
  - Determine latency of the GPS and transponder systems

## Ordering Information

### Versions and Options

Order Number	Description
141193	GC-130 GPS Antenna Coupler Kit

### Standard Accessories

141747	GC-130 GPS Antenna Coupler
141982	Rigid transit case
142163	Coax cable, 20 ft. TNC



The GC-130 includes a rigid transit case.

### Physical Characteristics

Coupler	
Diameter	20.0 in. (50.8 cm)
Height	7.6 in. (19.3 cm)
Weight:	8 lbs. (3.6 kg)
Transit Case	
Dimensions	24.9 x 23.7 x 13.1 inches
	63.25 x 60.2 x 33.27 cm

### General

Frequency	1575.42 MHz (L1/L1C/E1)
Return Loss	>12.0 dB at both the antenna under test input and coupler input
Insertion Loss	8.1 dB $\pm$ 0.5 dB
Repeatability	<1 dB
Isolation	>20 dB
Connector	TNC Female

### Export Control

This product is subject to the Export Administration ("EAR") (15 CFR 730–774) and may not be exported, re-exported or otherwise transferred to a foreign person, or outside the United States without authorization from the U.S. Department of Commerce.