ROJONE®
PTY LTD
Interconnect & Wireless Solutions
www.rojone.com.au

GPS L1/L2 Repeater System

ROJ-172-A-Kit

Key Features

- Field proven design
- High sensitive Rx gain
- Super high blocking performance for airbase applications
- Good radiation patterns
- No interruption to GPS receivers at 5m away from hangar
- Safe for personel and weapon systems in the hangar
- Easy installation
- Australian designed
- Australian made
- Supported locally

Key Benefits

- Protect Personnel
- Protect Equipment
- Reduce Fuel
- Improve Alert Status

Applications

- Flight Maintenance
- Flight Operations
- Indoor Testing
- Indoor Training

To provide adequate GPS coverage and reduce the mission response time for aircraft parked in the hangar or the shelter, Rojone has developed a series of high-performance GPS L1/L2 band repeaters for the Australian Air Force since 2003. Rojone's GPS repeater has reduced the mission response time by up to 90%.

ROJ-172A is a 3rd generation high performance GPS L1/L2 repeater, designed for professional and Defence applications. ROJ-172A provides reliable, high accuracy GPS L1/L2 band signals for GPS receivers used indoors or under shelters. It is safe for personnel and the weapon systems on Military aircraft, when used in the aircraft shelter. ROJ-172A will work reliably under extremely harsh EM environments, such as Military Bases where Radars and high-power transmitters are installed.

ROJ-172A will re-transmit high quality, high accuracy GPS L1/L2 band signals from the satellites with elevation greater than 5 degrees.

No RF spurious will be generated by ROJ-172A even under extreme conditions. ROJ-172A is developed based on the previous models used by RAAF bases around Australia.

Contact Details

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Certified System
Quality
ISO 9001
SAI GLOBAL

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Specifications

Frequency	1575 MHz ± 5 MHz for L1 Band
	1225 MHz ± 5 MHz for L1 Band
Polarization	RHC (Right Hand Circular)
Impedance	50 Ohms
RF Gain	45 dB typical
I/O VSWR	< 1.5:1
Output RF Power	-50 dBm Typical
OIP3	30 dBm
Isolation Alarm On	>-53 dBm from Rx Antenna
Filtering	> 70 dB @ Fo ± 30 MHz
	> 90 dB @ Fo ± 50 MHz
RF Isolation	< 20 dB between Tx1 And Tx2
RF Connectors	N Female
Power Supply	10 VA maximum @ 240V ± 10% / 50 Hz
Operating Temp.	-40° C to +60 ° C
Humidity	100 %
Size	460 x 300 x 120 + Connector
Weight	6 Kg

Kit Contains

Item No.	*Description*
ROJ-172-A-E324D	GPS L1 L2 Repeater Control Panel
GPSV3AR5X130O	Active Rx Antenna
GPSVPT5X13O	Passive Tx Antenna
NM-TERM-2W-6G	N Male Load, 2 Watt, 6GHz
OMNI-POLE-26MM	Mounting Pole
ROJ-GPSBKT-E	Pole Mounting Bracket
CA-xx (Optional)	LMR-400 & N Male x2 Cable Assembly Custom
CA-xx (Optional)	LMR-400 & N Male & TNC-M Cable Assembly Custom

Current Installations

- RAAF Base Williamtown
- RAAF Base Townsville
- RAAF Base Edinburgh
- RAAF Base Amberly
- RAAF Base Edinburgh
- RAAF Base Tindal
- Middle East

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