

WALL-E32/16/8/4*



**32-Element Anti-Jamming Antenna
16-Element Anti-Jamming Antenna
8-Element Anti-Jamming Antenna
4-Element Anti-Jamming Antenna**

*** Controlled Reception Pattern Antenna (CRPA)**

The Wall-E32 Anti-Jamming GNSS CRPA

The purpose of using the Wall-E32 anti-jamming antenna or Controlled Reception Pattern Antenna (CRPA) is to ensure stable reception of the GNSS navigation signal in conditions of CW or AWGN jamming from Electronic Warfare Systems (EWS). The Wall-E32 is connected to the GNSS Receiver (recommended JAVAD TR-2S) via a RF connector. The Wall-E32 CRPA has a embedded GNSS Receiver that can be connected to the Drone's autopilot via the UART interface.

Advantages

- Embedded GNSS Receiver
- Plug and Play
- ITAR Free



Specification

Receive GNSS:
GLONASS L1 + GALILEO E1 + GPS L1 + BDS B1
Interference Rejection:
GALILEO E1 + GPS L1 + BDS B1
Antenna Array: 32
Nulling Directions: 31
Anti-Jamming:
JSR 110 dB for 1 jammer AWGN with GNSS Receiver
75 dB for 31 jammer AWGN with GNSS Receiver
Power Supply: 12-24 V
Power Consumption: 85 W
RF Connector: TNC
Power Connector: MS3112E14-19P
Weight: App. 5000 g
Size: 400 x 400 x 50 mm
Temperature: -40°C to +70°C
Reliability: MTBF 2000 h
EMI/EMC: MIL-STD-461F
Environmental Tests: MIL-STD-810G

The Wall-E16 Anti-Jamming GNSS CRPA

The purpose of using the Wall-E16 anti-jamming antenna or Controlled Reception Pattern Antenna (CRPA) is to ensure stable reception of the GNSS navigation signal in conditions of CW or AWGN jamming from Electronic Warfare Systems (EWS). The Wall-E16 is connected to the GNSS Receiver (recommended JAVAD TR-2S) via a RF connector. The Wall-E16 CRPA has an embedded GNSS Receiver that can be connected to the Drone's autopilot via the UART interface.

Advantages

- Embedded GNSS Receiver
- Hardware and Software (Firmware) made in Russia
- RU Patent # 230 964
- Low power consumption up to 20 W
- Plug and Play
- ITAR Free

Low power consumption in drones is crucial for extending flight time, typically achieved through CRPA lightweight designs, efficient autopilots, and aerodynamic optimization.

Specification

Receive GNSS:
GLONASS L1 + GALILEO E1 + GPS L1 + BDS B1

Interference Rejection:
GALILEO E1 + GPS L1 + BDS B1

Antenna Array: 16

Nulling Directions: 15

Anti-Jamming:
JSR 110 dB for 1 jammer AWGN with GNSS Receiver
75 dB for 14 jammer AWGN with GNSS Receiver

Data Rate: 38400/1 Hz

Interfaces: UART

Data Output Format: NMEA 0183

Power Supply: 12-24 V

Power Consumption: 20 W

RF Connector: SMA-KF

Power Connector: J30J-9ZKP

Weight: 760 g

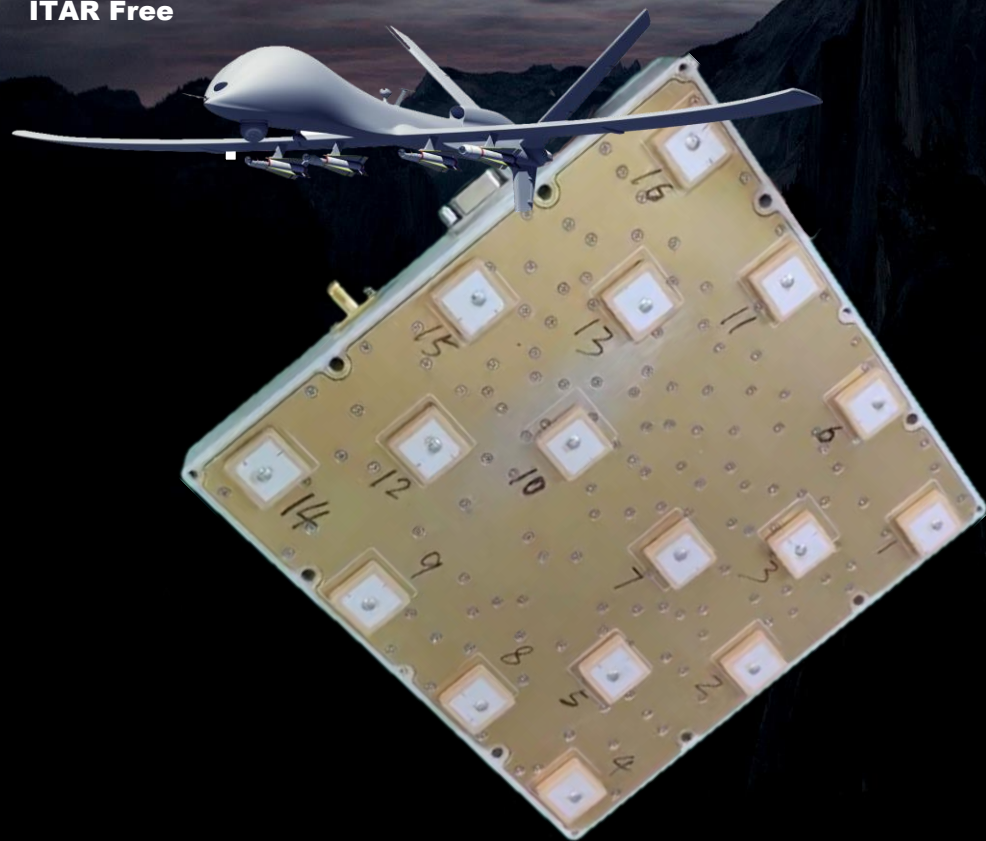
Size: 165 x 165 x 35 mm

Temperature: -40°C to +85°C

Reliability: MTBF 2000 h

EMI/EMC: MIL-STD-461F

Environmental Tests: MIL-STD-810G



The Wall-E8 Anti-Jamming GNSS CRPA

The purpose of using the Wall-E8 anti-jamming antenna or Controlled Reception Pattern Antenna (CRPA) is to ensure stable reception of the GNSS navigation signal in conditions of CW or AWGN jamming from Electronic Warfare Systems (EWS). The Wall-E8 is connected to the GNSS Receiver (recommended uBlox ZED-X20P or JAVAD TR-2S) via a RF connector. The Wall-E8 CRPA has an embedded GNSS Receiver that can be connected to the Drone's autopilot via the UART interface.

Advantages

- Embedded GNSS Receiver
- Hardware and Software (Firmware) made in Russia
- RU Patent # 230 964
- Low power consumption up to 9 W
- Plug and Play
- ITAR Free

Low power consumption in drones is crucial for extending flight time, typically achieved through CRPA lightweight designs, efficient autopilots, and aerodynamic optimization.

Specification

Receive GNSS:

GLONASS L1 + GALILEO E1 + GPS L1 + BDS B1

Interference Rejection:

GALILEO E1 + GPS L1 + BDS B1

Antenna Array: 8

Nulling Directions: 7

Anti-Jamming:

JSR 110 dB for 1 jammer AWGN with GNSS Receiver

75 dB for 7 jammer AWGN with GNSS Receiver

Data Rate: 38400/1 Hz

Interfaces: UART

Data Output Format: NMEA 0183

Power Supply: 12-24 V

Power Consumption: 9 W

RF Connector: SMA-KF

Power Connector: J30J-9ZKP

Weight: 330 g

Size: 110 x 100 x 25 mm

Temperature: -40°C to +85°C

Reliability: MTBF 2000 h

EMI/EMC: MIL-STD-461F

Environmental Tests: MIL-STD-810G

The Wall-E4 Anti-Jamming GNSS CRPA

The purpose of using the Wall-E4 anti-jamming antenna or Controlled Reception Pattern Antenna (CRPA) is to ensure stable reception of the GNSS navigation signal in conditions of CW or AWGN jamming from Electronic Warfare Systems (EWS). The Wall-E4 is connected to the GNSS Receiver (recommended uBlox ZED-X20P or JAVAD TR-2S) via a RF connector. The Wall-E4 CRPA has an embedded GNSS Receiver that can be connected to the Drone's autopilot via the UART interface.

Advantages

- Embedded GNSS Receiver
- Hardware and Software (Firmware) made in Russia
- RU Patent # 179 926
- Plug and Play
- ITAR Free

Specification

Receive GNSS:
GLONASS L1 + GALILEO E1 + GPS L1 + BDS B1
Interference Rejection:
GALILEO E1 + GPS L1 + BDS B1
Antenna Array: 4
Nulling Directions: 3
Anti-Jamming:
JSR 95 dB for 1 jammer AWGN with GNSS Receiver
80 dB for 3 jammer AWGN with GNSS Receiver
Data Rate: 38400/1 Hz
Interfaces: UART
Data Output Format: NMEA 0183
Power Supply: 12-24 V
Power Consumption: 5 W
RF Connector: SMA
Power Connector: J30J-9ZKP
Weight: 80 g
Size: 55 x 55 x 15 mm
Temperature: -40°C to +85°C
Reliability: MTBF 2000 h