

OE-120B/UPX

Antenna Group



The OE-120B/UPX is an advanced, electronically steered shipboard antenna group used with identification and air traffic management systems.

Description

The antenna group supports a wide range of systems, including identification friend or foe (IFF), secondary surveillance radar and air traffic control radar. The field-proven system is highly reliable, offering constant fleet protection for navies around the world.

Features and benefits

- Instantaneous, multiple target identification supports defense against today's sophisticated air threats.
- Accommodates all standard IFF modes to support a wide range of mission requirements.
- Adapts to land and sea applications to support a variety of mission environments.
- Electronically steered system architecture offers increased reliability and reduced maintenance.
- Array configuration allows for smooth performance degradation in the event of a failure.

Parameters

Transmit frequency	1030 MHz
Receive frequency	1090 MHz
Transmit power maximum (Vertical polarization)	Sum beam – 5 KW Difference beam – 1 KW Omni (~44 degree elevation) – 5 KW
Transmit format	Accommodates all standard IFF and air traffic control radar beacon system modes, as well as other modes limited to 0.02 duty cycle
Sum beam shape	7 degree azimuth, 44 degree elevation, 360 degree azimuthal coverage
ISLS effective beamwidth	Sum/omni – 9.3 degree (1-port) Sum/difference – 3.0 degree (2-port)
Beam position corrections (Automated)	20 degree roll 12 degree pitch True north to relative bearing for heading
Beam azimuth positions	1024 separate beam positions
Beam positioning time	50 microseconds (maximum)
Beam positioning command	External or internal
Input power, total system	115V 60/400 Hz, single-phase, 600 watts

Environmental Capabilities

Temperature limits	
Above deck	-28 degrees celsius to +65 degrees celsius
Below deck	0 degrees celsius to 50 degrees celsius
Relative humidity	0 percent to 95 percent
Nuclear air blast	to 3 pounds / square inch to 4.5 pounds / square foot
Icing	
Storage	-62 degrees celsius to +75 degrees celsius

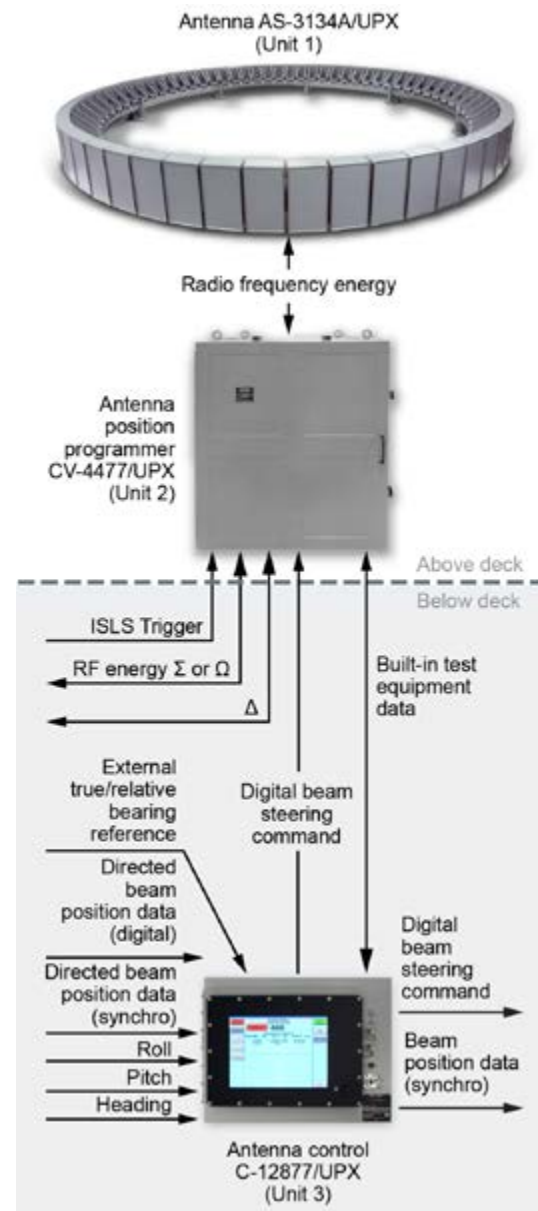
Physical Characteristics

Above Deck Components

Antenna AS-3134A/UPX (Unit 1)	16.25 inches height x 12.5 feet depth 448 pounds
Antenna position programmer CV-4477/UPX (Unit 2)	45 inches height x 34 inches width x 20 inches depth 345 pounds (unit), 200 pounds (cables)

Below Deck Component

Antenna control C-12877/UPX (Unit 3)	21 inches height x 21 inches width x 22 inches depth 80 pounds (unit), 50 pounds (isolation system)
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