

# Environmental Control Unit (ECU) for the Joint Biological Point Detection System (JBPDS)



**JBPDS**



**ECU**



## KEY FEATURES:

- 250 CFM Filtered Air
- 4,000 BTU Net Cooling Capacity
- 6,000 BTU Heating Capacity

## GENERAL PRODUCT DESCRIPTION:

The MLS Environmental Control Unit (ECU) for the Joint Biological Point Detection System (JBPDS) is a robust fully autonomous cooling and heating system for the bio-detection instrument suite that is fully functional in any operational environment. JBPDS provides automatic detection and identification of airborne biological agents at very low levels, triggers local and remote warning systems, and communicates threat

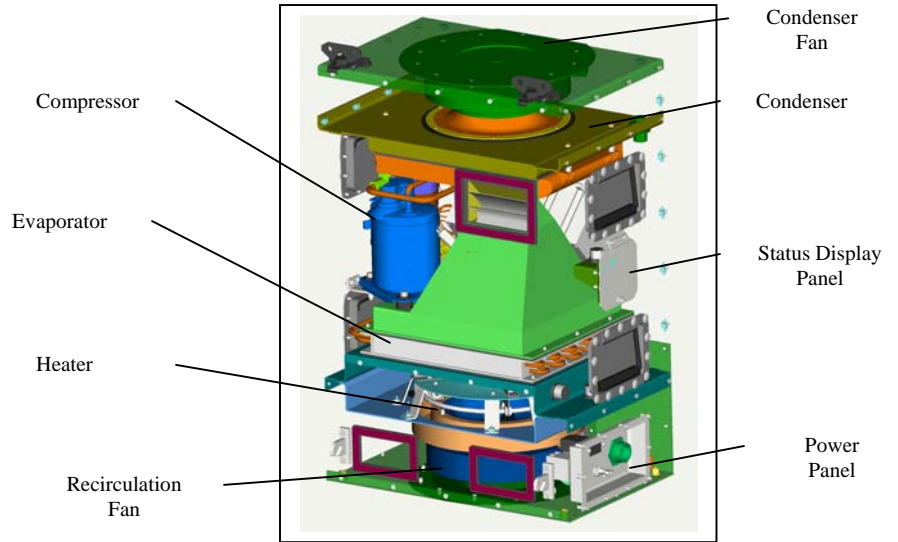
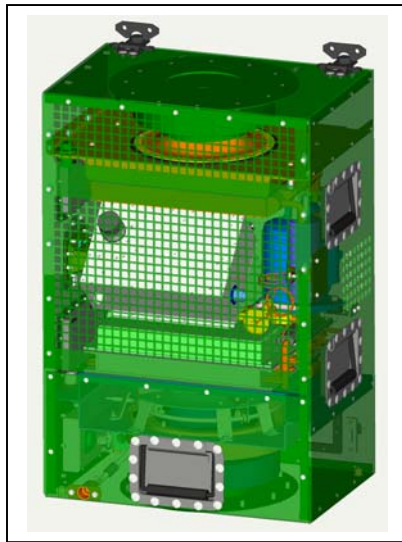
information over standard communication systems.

The MLS Environmental Control Unit (ECU) automatically detects the JBPDS internal temperature on startup by analyzing the recirculation air coming from the unit. Once the JBPDS temperature is determined, the ECU will apply heating, cooling, or vent recirculation depending on preprogrammed conditions. The ECU will also perform a self-test and notify the operator of any

malfunctions, while continuing to operate, if the malfunction is unrelated to the current operating mode.

The ECU is attached to the JBPDS unit and depends on the JBPDS trailer for power. The ECU is capable of providing 4,000 Btu/hr of cooling at 120 °F ambient, and 6,000 Btu/hr heating. The unit uses 115V/60Hz power and R134-a refrigerant.

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## Overall ECU Specifications:

Exterior Dimensions (L x W x H).....	13" x 20" x 30"
Gross Weight .....	100 Lbs.
Electrical Input .....	20A @ 115 VAC/60GHZ
Air Flow .....	250 CFM
Cooling Capacity .....	4,000 Btu/Hr @ 120 °F
Heating Capacity .....	6,000 Btu/Hr
Refrigerant Type .....	R-134a
Max Power Consumption .....	1,900 Volt Amps

## Operating Parameters:

Temperature .....	-28 °C to 50 °C
Altitude .....	Sea level to 10,000 ft
Slope Angle .....	0° to 30°