



# PROGRAMMABLE INTERFERENCE BLANKER UNIT - PIBU

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## **A highly configurable solution for optimized interference blanking for helicopters and transport aircraft**

The Programmable Interference Blanker Unit (PIBU) provides prioritized blanking of aircraft transmitters and receivers to avoid mutual interference.

The PIBU is configurable via the PIBU Support Software application, which runs from a standard laptop PC and interfaces the PIBU via standard ethernet interface.

The PIBU's many inputs and outputs are configured with respect to voltage levels as well as impedances and the blanking matrix allows any input(s) to map to any output(s). Furthermore, the PIBU provides configurable pulse shaping in the time domain, including independent leading edge, trailing-edge delays and pulse widths.

The PIBU features standard 5 V, 7 V, 28 V single-ended blanker I/O's as well as bi-directional and differential channels.

### **Technical description**

The Programmable Interference Blanker Unit (PIBU) uses a modular concept which allows for customization of available blanker I/Os.

The blanking matrix is realized via powerful FPGA, ensuring low latency and full programming capabilities, An on-chip Power PC provides an Ethernet load function for easy configuration either on-board the aircraft or in a laboratory, using a simple break-out adaptor.

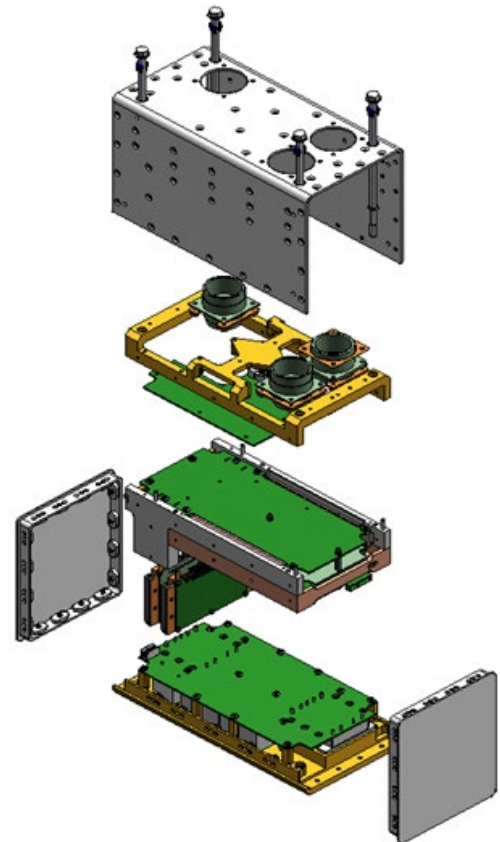
The PIBU is designed for a 2-level maintenance concept in which Built-In Test (BIT) and a discrete Go/No-Go signal provides for detection of and signaling of failures.





## General technical overview

Input power	115 VAC/400 Hz
Current consumption	Max. 2.5 A. Nom. 0.6 A
Dimensions (l x w x h)	173x238x118mm (6.8x9.37x4.65")
Weight	Max. 4.54 kg (10 lbs)
General Interface	Loading: Ethernet BIT Monitor: 28 V Discrete Spare General Purpose: 2x28 V Discrete
Blanking Interfaces (12 Input)	10 type 1 Threshold: 2.2 V or 10 V Impedance 93 $\Omega$ or 2.2 k $\Omega$ Max. input level: 70 V  12 type 2 Diff. EIA-422 Impedance: 100 $\Omega$
Blanking Interfaces (19 Output)	8 type 1 Output level: 5 V or 7 V Load Impedance: 93 $\Omega$  9 type 2 Output level: 28 V or 36 V Load Impedance: 300 $\Omega$ to 2 k $\Omega$  11 type 3 Diff. EIA-422 Impedance: 100 $\Omega$
Blanking Interfaces (6 Bi-Directional)	8 type 1 Input type 1 + output type 2



## Currently integrated on and certified for

Lockheed Martin C-130J  
Royal Danish Air Force EH-101  
Gulfstream G550  
F-5