

# ANS-1000 Airborne Network Storage with RMM

## **Extended Temperature Range**

**ANS-1000** is an Airborne Network attached Storage. The unit is made from the qualified **AMC-1000 Avionic PC with Windows Embedded 7**. The **ANS-1000** includes a **Removable Memory Module (RMM)**, for storing classified data, recorded before and during missions, in military platforms such as **Fighters, helicopters and large UAVs**.

Beside its Ethernet connectivity, the unit can be customized, adding recording capability from various interfaces, such as Muxbus 1553 ports, RS-422/232 Serial Ports, ARIN-429, etc'.

The **ANS-1000** is built for operational maintainability, with an optional quick release mounting tray.



## **Dimensions & Weight**

135x118x255 (WXHXL) [mm], 2.8Kg

## **Removable Memory Module (RMM)**

The RMM is a 256GB 2.5 inch SSD. It may store and shares maps, navigation, and mission data as well as configuration files. The RMM can be attached to a PC based Ground station via an RMM Adapter (RMA). The SSD Features: Static and Dynamic Wear-Leveling, Bad Block Management, Dynamic Power Management and SMART (Self-Monitoring, Analysis and Reporting Technology), and Power Failure Protection Reliability Specifications  
MTBF: > 3,000,000 hours @25C  
Data Retention: 10 years at 25°C

## **Test Cables**

BES offers a set of test cables that could be used in software lab to run the computer during development.

## **RMM Adapter (RMA)**



## **HWR Base Line Configuration**

- ♦ CPU- COM Express
- ♦ 8GB SSD for Win Embedded 7 OS.
- ♦ RMM - 32-256GB SSD.
- ♦ DRAM - 2GB
- ♦ VGA
- ♦ 2 x USB 2.0
- ♦ LAN: 1000 BaseT
- ♦ Power Supply: 18-36VDC per MIL-704E.
- ♦ Environmental Conditions per MIL-STD-810F
- ♦ EMI/RFI per MIL-STD-461E
- ♦ MIL-D-38999 Connectors
- ♦ Extended temperature range from -40°C to +71°C
- ♦ Hardware (FAST) Secure Erase

## **SOFTWARE**

The internal SSD of the **ANS-1000** is loaded with Windows Embedded Standard 7 and drivers, per customer's specifications.

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## **Environmental Conditions**

### **Temperature**

The ANS-1000 will not be damaged or affected by the effects of ambient air temperature as follows: Operating: The ANS-1000 shall meet performance requirements specified herein after exposure to temperatures from -40° to +71°C.

Non-operating: (Storage/transportation) from -54° to 85°C.

### **Relative humidity**

Operating: 95% relative humidity (RH) with no condensation.

Non-operating: 95% RH.

### **Vibration**

According to MIL-STD-810F for Airborne, Helicopter or UAV.

### **Shock**

According to MIL-STD-810E, 40g saw tooth for duration of 11msec.

### **Fungus**

The ANS-1000 is non-nutrient to fungus growth according to the requirements in MIL-STD-810F.

### **Sand and Dust**

The ANS-1000 shall operate as specified herein while and after being subjected to sand and dust as encountered in dry arid areas according to the requirements of MIL-STD-810F.

### **Salt Fog:**

The ANS-1000 is resistant to the corrosive effects of salt fog per MIL-STD-810F.

### **Altitude**

The ANS-1000 shall operate as specified at altitude of 0 to 40,000 ft

### **Reliability:**

MTBF of 10,000 hours

Mean Time To Repair

### **Electromagnetic Interference:**

FDR-1000 complies to MIL-STD-461E.

- ♦ CS101 Conducted Susceptibility, Power Leads, 30HZ-50KHz.
- ♦ CE102 Conducted Emissions, Power Leads, 10kHz - 10MHz
- ♦ RE102 - Radiated Emissions, 10 KHz to 18 GHz
- ♦ RS103 - Radiated Susceptibility, Electric Field, 2MHz -18GHz
- ♦ CS114 - Conducted susceptibility, bulk current injection, 10KHZ - 200 MHZ.

### **Thermal Design**

The cooling of the components on the FDR-1000 PC cards, Power Supply and the Pentiums chip is accomplished by conduction through the aluminum enclosure of the unit.

### **External Connectors**

External connectors per MIL-D-38999 are used for interfacing with external equipment.

### **Tray Assembly—Option**

The ANS-1000 is designed as an LRU. It may be removed easily for maintenance. with its optional Tray. The Tray Assembly includes two parts :

- a. A Tray Base which is fixed to the plane.
- b. Adapter Assembly that is attached to the ANS-1000 base.

