

AP Labs

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AP Labs**FS-7277 and Drive**

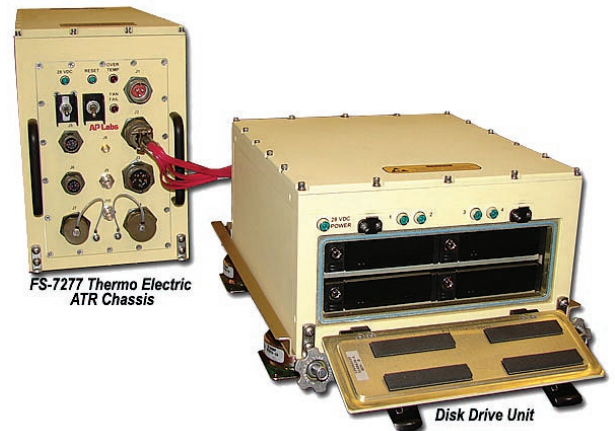
The AP Labs FS-7277 Thermo Electric Chassis is a rugged ATR (long) enclosure designed for five slots of 6U VME or CompactPCI boards. Using Thermo Electric Technology (TEC), this chassis enables the use of convection-cooled boards in a completely sealed (and waterproof) environment.

This unit will not only withstand temperature extremes, shock, vibration, humidity, and dust, but is also designed to withstand exposure to high-pressure sprays such as those experienced by military vehicles passing through a tank wash.

The cooling unit consists of a cold plate, a Thermo Electric module, multiple heat sinks, and fans to assist heat rejection. The cold surface faces the inside of the chassis and the hot side is exposed to the external environment. The Thermo Electric module transfers heat from the cold plate to the heat sink. The internal fans circulate cold air over the circuit cards and through the card cage.

The external fan forces air over the external air to air heat sink in order to dissipate the liberated heat. This particular cooling technique eases the challenges presented by high performance embedded computers and the limited capabilities of conventional heat exchangers.

Pictured with the FS-7277, the AP Labs Disk Drive Enclosure is a low power disk drive carrier, which can hold up to four SATA drives within LRUs. This high performance disk drive unit is a sealed assembly and ideal for moisture resistant applications. The removable hard disk cartridge technology combines the features of a flexible-cartridge system and removable disk drive system, providing the convenience of data portability from your rugged unit to your lab setup. When used in conjunction with the FS-7277, this Thermo Electric ATR chassis is a rugged reliable data recording system, with removable hard disk cartridge drives capable of acquiring real-time high resolution RGB and/or NTSC/PAL video, and audio as well as high speed serial data.

**FEATURES**

- › Designed to meet the needs of the military's next generation vehicles
- › Sealed unit to operate in harsh exterior environment
- › Front I/O panel customized to user specification
- › Allows use of COTS air-cooled boards in environments typically requiring conduction-cooled
- › Thermostatic control of internal temperature
- › Watertight to MIL-STD-108E – Immersion to 3 feet for one hour
- › Chem-filmed per MIL-C-5541, Class 3
- › All fastener hardware is stainless steel
- › Access conforms to MIL-HDBK-45, guideline 36
- › DC input: 28 VDC per MIL-STD-704A
- › DC draw: 12 Amp maximum
- › Custom Options – I/O panel, internal I/O cabling, connectorization of I/O panel, backplane, elapsed time indicator