

### **Solid State Recorder Features:**

- Rugged Modular Construction
- Designed for Airborne and Shipborne applications
- 28 Volts  $\pm$  4 Volts DC Power as standard other options available
- Records and Replays an IRIG 106 serial PCM data stream
- Optional IRIG 106 PCM and Clock data input interface - TTL or RS422
- Compatible with the output of the ApolloDas 8600 PCM Encoder System
- Data Rates in excess of 10 MBPS can be recorded
- External Recording Start and Stop Control
- Additional User specified control features can be incorporated into the unit
- Up to 256 GBytes of non-volatile storage can be provided in one chassis.
- Solid State Recorder emulates a Windows Disk Drive
- Internal CPU runs an embedded Windows Operating System
- Compatible with the Apollotek GDSmate Telemetry Environment Software Package
- An Ethernet Port is provided for high speed data download and remote access control
- A PC Monitor, Windows Tablet, Laptop or remote desktop PC can be connected to set up and control the Recorder



Typical Configuration

Apollotek manufactures a range of ruggedised Shipborne and Airborne Solid State Data Recorders using a unique implementation of solid state non-volatile Flash Memory storage elements and Very High Density programmable logic technology. Embedded signal processing is used to control the data formatting and recording of PCM data into Windows compatible data files.

The Standard 8700-FD Solid State Recorder is currently available with capacities up to 256 GBytes.

Data is stored in Microsoft Windows file format for ease of post processing.

The 8700-FD is designed to accept the output of ApolloDas 8600 IRIG 106 standard PCM encoders and similar devices and the Recorder can be configured to accept continuous data up to bit rates in excess of 10 MBPS.

The Recorder is available in several configurations including the capability to replay the recorded serial data stream as Data and Clock to feed to external equipment. An internal PCM Decommuration option is also available.

The Solid State Recorder assembly is mechanically robust and of modular internal construction. The approximate dimensions of the Recorder Unit are: 160mm x 160 mm x 160 mm.

The standard power supply module provides operation from 24 V DC to 32 V DC. Other operating Voltage ranges, including 12 V DC can also be provided.

### Solid State Recorder Controls

The Solid State Recorder Software Controls are simple Start, Pause and Stop which can be controlled through contact closures on the input connector or the Recorder can be controlled using a software utility if the unit is operated with a monitor and keyboard attached.

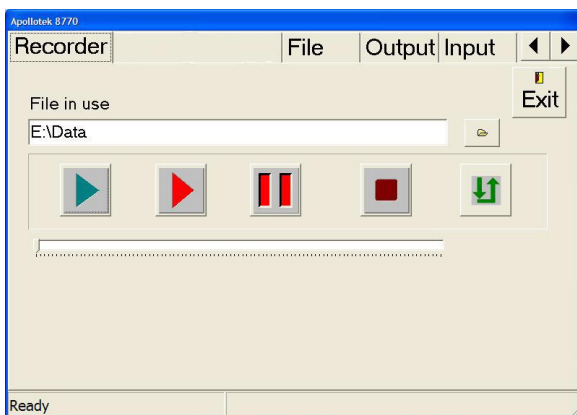
### The GDSmate Telemetry Environment Software Package

The Apollotek 8700-FD Solid State Recorder is typically delivered with the Apollotek GDSmate Telemetry Environment software package which can be used to Download the stored data files and which can also provide tabular and graphical data display.

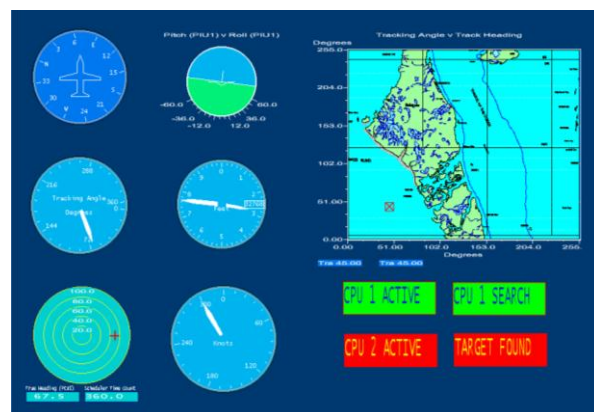
GDSmate can also be supplied to process data acquired from Telemetry Systems, directly from sensors and from other Instrumentation sources including the **Apollotek** range of **Solid State Recorders**. GDSmate is in widespread use within the International Telemetry community. The package provides real time processing algorithms to enable arithmetic, algebraic and Boolean algorithms to be applied to individual parameters and to derive processed parameters.

### Data Recording and Data Presentation

The Apollotek Solid State Recorder can be controlled through an intuitive Graphical User Interface. The recorded data can be retrieved, processed and displayed using the standard features of GDSmate. GDSmate provides a wide range of graphical and tabular displays. Archived data can also be exported in many industry standard formats. A User Manual describing the general facilities and capabilities of GDSmate is available on request.



Solid State Recorder Control



A GDSmate parameter screen display

Please contact **Apollotek** or your local Representative for further details of the ApolloDas 8700 Solid State Recorder series, ApolloDas 8600 modular airborne Flight Test Instrumentation, PCM Encoders, Data and Video RF Transmitters, USB powered Telemetry Instrumentation, Receivers, Bit Synchronisers, Decommutators, Simulators and Telemetry Groundstations. Apollotek would be pleased to respond to any of your Telemetry and Test and Evaluation data collection, processing and presentation requirements.