APOLLOTEK

8780-IF Series
## Receiver IF Recording System

Features:

- **Continuous recording of the 10.7 MHz IF analogue output from Telemetry Receivers**

- **Unique Apollotek Analogue signal processing and Digital transformation implementation provides faithful recording and reproduction of the analogue signal**

- **Data is recorded onto internal high speed hard disks**

- **DVD Writer provided for archiving**

- **Easy to use Touch Screen User Interface to control recording and replay**

- **Runs the Windows XP Operating System**

- **Ethernet Network Interface included**

- **19 inch Rack Mounting versions available**

- **Unique Internal Bit Synchroniser and PCM Decommutator Options**

- **Multiple Apollotek Bit Synchronisers and PCM Decommutators can be incorporated into the chassis**

- **The Apollotek range of Products, Systems and Solutions includes airborne flight test instrumentation, solid state recorders, telemetry transmitters and a wide range of PC based Groundstation instrumentation Products and Systems including solutions for multiple stream real time telemetry and avionics bus data processing requirements**
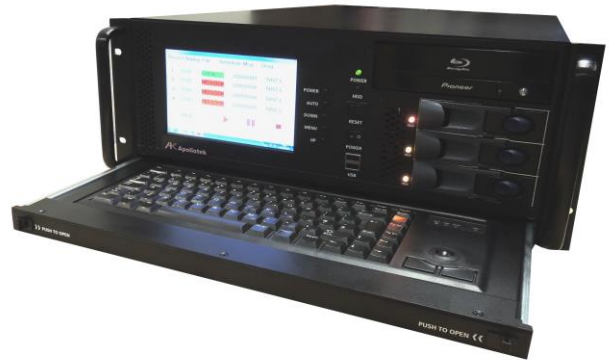
This version of the Apollotek APK8780 series of products is designed to provide signal recording of 10.7 MHz Intermediate Frequency analogue signals as typically provided by the outputs of Telemetry Receivers.

The Analogue Signal from the associated Telemetry Receiver is processed and translated into the digital domain by an Apollotek FPGA based digital signal processing unit and then the data is stored in real time onto an internal hard disk subsystem.

Data is replayed from the hard disk and then processed to provide an Analogue Output which faithfully reconstructs the originally recorded analogue signal.

A simple user interface similar to a standard VCR or DVD recorder is provided through a touch screen display on the front panel of the unit.

The APK8780 Recorder runs under the Windows XP Operating System and the unit can also therefore be used as a desktop computer and all Windows file management, storage, retrieval and file transfer facilities are available to the user.

The APK8780 can also incorporate modules from the ApolloDas 8600 range of multiple channel signal conditioning modules to provide a complete data acquisition and recording system.

Other models in this range of Apollotek Recorder products can incorporate up to four channels of PCM Bit Synchronisation and Decommutation in addition to providing analogue baseband recording and replay.

APOLLOTEK

STANDARD RECORDER SPECIFICATIONS

Electrical and Performance Specification

Analogue Recording Bandwidth	Up to 15 MHz as standard.
	Higher data rate options available
Standard Input Signal Amplitude	0.4 V to 6 V (± 3 V peak-to-peak)
Input Signal Impedance	50 Ohms
Input and Output Signal Connectors	BNC Rear Panel Connections for each channel
Output Signal Level	Unity gain as standard – Same as Input Signal
Output Signal Impedance	50 Ohms

System Specification

Power Requirements	Nominal 230 V ac 50 Hz supply
Software	Set-Up and control software supplied
	The Apollotek GDSmate Telemetry Environment Software package can be incorporated as an extras cost item

Operational Environmental Specification

Temperature	0 ^{O} Centigrade to +50 ^{O} Centigrade
Humidity	0 to 90% non-condensing

Non-operating in appropriate packaging

Temperature	-25 ^{O} Centigrade to +90 ^{O} Centigrade

Model Numbers:

8780-IF	Single Channel Analogue Recorder and Replay System optimised for 10.7 MHz IF signals
8780-1	Single Channel Analogue Recorder and Replay System
8780-2	Dual Channel Analogue Recorder and Replay System

Also available:

8770-1	Single Stream Input Bit Synchroniser Unit
8770-2	Dual Stream Input Bit Synchroniser Unit
8770-3	Triple Stream Input Bit Synchroniser Unit
8770-4	Quad Stream Input Bit Synchroniser Unit
8770-1x1	Single Stream Bit Synchroniser and Decommutator Unit
8770-2x2	Dual Stream Bit Synchroniser and Decommutator Unit
8770-3x3	Triple Stream Bit Synchroniser and Decommutator Unit
8770 4x4	Quad Stream Bit Synchroniser and Decommutator Unit