

Features:

- Multiple independent RF and PCM Input Channels in one chassis
- Typically up to four channel of PCM recording per Groundstation chassis
- User selectable RF PCM, Analogue PCM or Digital Data and Clock signal input capability
- Provides a total PCM recording throughput of greater than 100 MBits/second which can be user defined to record multiple PCM streams at different bit rates
- IRIG B external Time Code Input
- Easy to use Touch Screen User Interface to control recording and replay supplemented by pull out keyboard and mouse
- Windows Operating System
- 19 inch Rack Mounting Chassis
- Dedicated internal Apollotek Receivers, PCM Bit Synchronisers and Signal Recovery modules provide high performance time stamped recording and replay facilities
- An external signal such as receiver AGC combined with Bit Lock status can be user selected to automatically start recording
- All inputs and Outputs via rear panel BNC connectors
- Removable Solid State storage media are used for data storage
- Per Channel PCM Data and Clock outputs are provided



The Apollotek APK8780 series of Telemetry Groundstations and Data Recorders are designed to provide recording and replay of multiple serial PCM Streams as typically processed by internal Telemetry Receivers, Bit Synchronisers and Decommutors.

Each PCM Stream to be recorded is decommuted by an Apollotek digital signal processing engine and the data is stored in real time onto an internal hard disk subsystem.

A Recording Time tagging capability is also provided.

Recording criteria are user entered through a forms based channel oriented set-up procedure.

Removable high speed Solid State Disks are used for data storage and Data Replay.

Recording can be manually or remotely initiated and can also be automatically initiated by monitoring the lock status of the input Bit Synchronisers together with an associated Receiver AGC voltage level.

Remote Control of the Replay process over Ethernet can be supported. Recorded Data Filed can be exported over Ethernet.

A per channel Data and Clock Output of the Input PCM streams are provided while data is being recorded.

The APK8780 Telemetry Groundstation runs under the Windows Operating System and supports all Windows file management, storage, retrieval and file transfer facilities and utilities.

Variants of the APK8780 can also incorporate additional data input and data output modules to provide a flexible configuration data acquisition and recording system.

GENERAL SPECIFICATIONS

Electrical and Performance Specifications

Total PCM Bit Rate Recording	Up to 100 MBPS as standard.
Inputs:	S-Band or L-Band RF, Serial PCM, PCM Data and Clock
Direct Input Signal Amplitude	0.5 V to 10 V (± 5 V peak-to-peak) as standard. Other user defined input amplitude options are available
Input Signal Impedance	50 Ohms or 10 KOhms as standard – select when ordering
Input and Output Signal Connectors	BNC Rear Panel Connections for inputs and outputs
Channel Output Signal Level	TTL or RS422 Levels as standard
Output Signal Impedance	50 Ohms or 10 KOhms as standard – select when ordering
Networking	Gigabit Ethernet I/O port provided TCP/IP and UDP Remote Ethernet Control and Data File Transfer facilities can be incorporated

System Specifications

Power Requirements	115 V ac and 230 V ac 50 Hz autosensing supply
Software	Set-Up and controlled using Windows Operating System The Apollotek GDSmate Telemetry Environment Software package is provided for display of decommutated PCM data
User Controls	Via front panel touchscreen and Pull Out Keyboard and Mouse. External larger screen control supported Restricted Remote Control functions via user provided BGAN or similar interface

Operational Environmental Specifications

Temperature	0 ° Centigrade to +50 ° Centigrade
Humidity	0 to 90% non-condensing

Non-operating in appropriate packaging

Temperature	-25 ° Centigrade to +70 ° Centigrade
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All specifications are subject to change without notice