

Features:

- A range of configurable PC based Turnkey Groundstation Systems including Telemetry and Avionics signal recovery and data processing modules controlled by the generic Apollotek GDSmate Telemetry Environment software package
- Portable Configurations
- Ruggedised Configurations
- Systems can be provided in many configurations including Portable, Desktop, Rack Mounting and multiple Server and Workstations
- Compatible with Windows operating systems
- PCM Stream Processing
- PAM Stream Processing
- Mil-Std 1553 Bus Processing
- ARINC 429 Bus Processing
- Time Correlation between multiple data streams
- Real Time Graphical and tabular data displays are easily linked to raw and processed parameters without compiling
- Real Time Archiving to Disk
- High Speed Networking including Gigabit Ethernet
- Interfaces to multiple Digital Tape Recorders and other devices through SCSI and Ethernet Ports

Apollotek high performance Telemetry and Avionics Groundstations are designed to be scalable across all PC platforms ranging from laptops to rack mounting multiple simultaneous data stream processing systems containing Telemetry and Avionics signal recovery and decommutation Modules. Apollotek 8000 Series Systems can be configured with high speed multiple CPU processors with real time Graphical Data Displays, Tape Replay and RAID based recording capability. Standard system configurations are available to host a selection of Tuneable Radio Receivers, Diversity Combiners, Bit Synchronisers, Decommutators and many types of I/O interfaces.

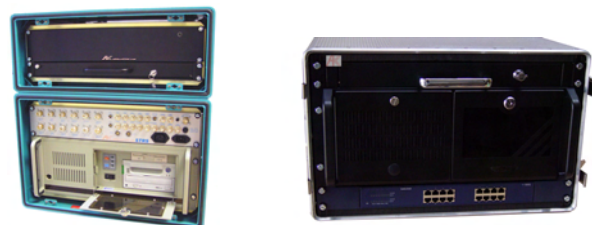
Multiple CPU & RAID based Telemetry Groundstation with Gigabit Ethernet Server Facilities



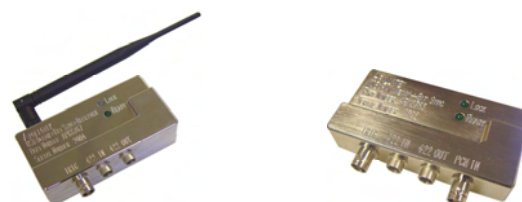
Ruggedised PC configurations



Ruggedised Portable Multiple Stream Groundstation

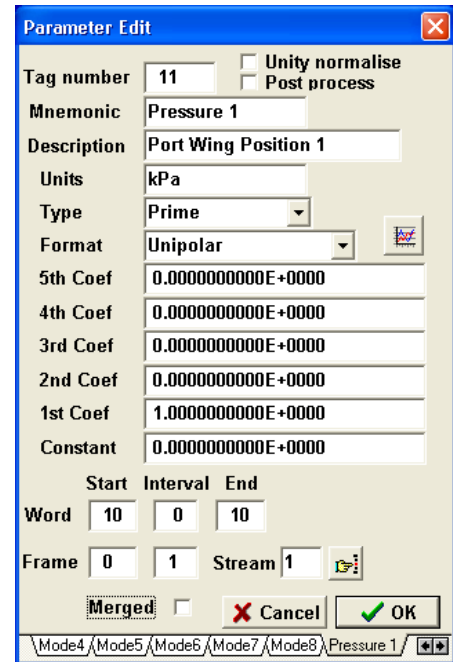


Compatible with the Apollotek USB range of Receivers, Bit Synchronisers and Decommutators

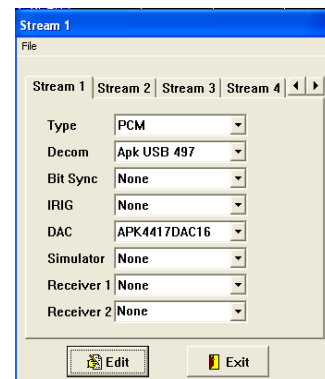


GDSmate Software

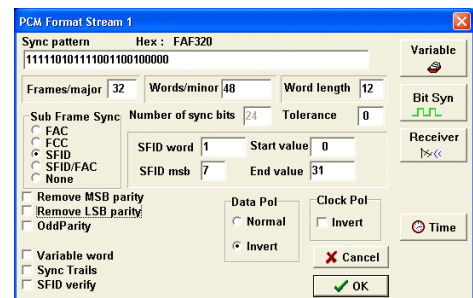
- The GDSmate Parameter Database is developed interactively with the user through a Parameter Edit form. Each Parameter can be allocated a unique Mnemonic and Description.
- The User can apply linearising and calibration coefficients to the Parameter. A Maths Processor editor form is displayed if the Parameter type is declared as a Processed Type. The Maths processor can also incorporate other parameters into the processing algorithm.
- Mil-Std 1553 and ARINC 429 Avionics Bus data have similar parameter edit forms with the message identification replacing the PCM frame location definition.
- GDSmate also supports direct ARINC and Mil-Std 1553 bus monitoring
- A PCM Frame Format form is used to set up the characteristics of the frame and the synchronisation strategy. The PCM Bit Rate is set from this form as is the selection of the default time source which can be IRIG or Computer derived. Secondary Forms are presented for definition of variable word length formats. The PCM Format Form can also set up an associated PCM Simulator.
- An Interactive colour keyed graphical presentation of the Frame Map for PCM or Message Map for Serial Bus data streams is provided. The user can point and click on a parameter in the frame map and get immediately to the Parameter Editor.
- Data can be exported in many common post processing file formats to facilitate further analysis including multiple stream time correlated and re-sampled formats



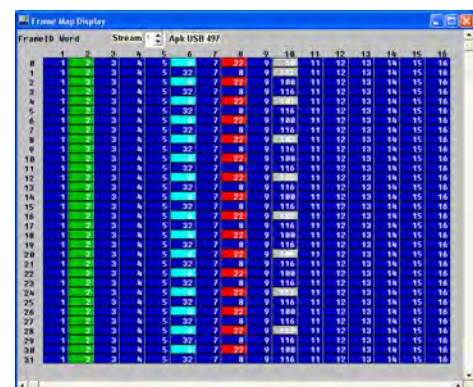
Parameter Edit dialog box showing configuration for Tag number 11, Mnemonic Pressure 1, Description Port Wing Position 1, Units kPa, Type Prime, Format Unipolar, and various coefficients. It also includes fields for Start, Interval, End, Word, Frame, and Stream, along with Merge, Cancel, and OK buttons.



Stream 1 dialog box showing configuration for Type PCM, Decom Apk USB 497, Bit Sync None, IRIG None, DAC APK4417DAC16, Simulator None, Receiver 1 None, and Receiver 2 None. It includes Edit and Exit buttons.



PCM Format Stream 1 dialog box showing Sync pattern 111110101110011001000000, Hex FAF320, Frames/major 32, Words/minor 48, Word length 12, Sub Frame Sync SFID, and various parity and verification options. It includes Cancel and OK buttons.



Frame Map Display showing a grid of parameters for Stream 1 (Apk USB 497). The grid displays Frame ID, Word, and parameter values for 31 frames. The parameters are color-coded (green, blue, red) to indicate different states or values.

Frame ID	Word	Parameter	Value
1	1	Pressure 1	0.000000000E+0000
1	2	Pressure 1	0.000000000E+0000
1	3	Pressure 1	0.000000000E+0000
1	4	Pressure 1	0.000000000E+0000
1	5	Pressure 1	0.000000000E+0000
1	6	Pressure 1	0.000000000E+0000
1	7	Pressure 1	0.000000000E+0000
1	8	Pressure 1	0.000000000E+0000
1	9	Pressure 1	0.000000000E+0000
1	10	Pressure 1	0.000000000E+0000
1	11	Pressure 1	0.000000000E+0000
1	12	Pressure 1	0.000000000E+0000
1	13	Pressure 1	0.000000000E+0000
1	14	Pressure 1	0.000000000E+0000
1	15	Pressure 1	0.000000000E+0000
1	16	Pressure 1	0.000000000E+0000
1	17	Pressure 1	0.000000000E+0000
1	18	Pressure 1	0.000000000E+0000
1	19	Pressure 1	0.000000000E+0000
1	20	Pressure 1	0.000000000E+0000
1	21	Pressure 1	0.000000000E+0000
1	22	Pressure 1	0.000000000E+0000
1	23	Pressure 1	0.000000000E+0000
1	24	Pressure 1	0.000000000E+0000
1	25	Pressure 1	0.000000000E+0000
1	26	Pressure 1	0.000000000E+0000
1	27	Pressure 1	0.000000000E+0000
1	28	Pressure 1	0.000000000E+0000
1	29	Pressure 1	0.000000000E+0000
1	30	Pressure 1	0.000000000E+0000
1	31	Pressure 1	0.000000000E+0000