


## OMEGA-FIRE Flight Line Instrumentation Real-time Executive Software

- Ideally suited for field deployment and on-board test operations with single PCM stream systems
- Rapid load and signal acquisition—fast access to PCM frame data
- Integrated PCM map display presents a real-time graphical representation of PCM data as modifications are made to the instrumentation system
- Selected words can be processed with polynomial conversions, logged to a disk with IRIG time stamps, and simultaneously displayed in real time
- Supports direct connection to RS-232 data instrumentation path, which eliminates the need for PCM bit sync and decom hardware

	Raw	EU	Time
SFID	28	28.000000	003 13:22:41.875000
voice	59	59.000000	003 13:22:41.875000
CRC	1159	1159.000000	003 13:22:41.875000
MJFID_LSW	54	54.000000	003 13:22:41.860000
data01	598	598.000000	003 13:22:41.875000
data02	412	412.000000	003 13:22:41.875000
data03	168	168.000000	003 13:22:41.875000
data04	1286	1286.000000	003 13:22:41.875000
ana1	0	0.000000	003 13:22:41.875000
ana2	891	891.000000	003 13:22:41.875000
ana3	1292	1292.000000	003 13:22:41.875000
ana4	402	402.000000	003 13:22:41.875000
FSYNC	1151	1151.000000	003 13:22:41.875000
MJFID_MSW	64	64.000000	003 13:22:41.875000
MJFID_Mid	37	37.000000	003 13:22:41.828000

### Quick...Easy...Fast!

Wyle Laboratories' innovative OMEGA-FIRE software coupled with its PCI-based PCM acquisition hardware offers the telemetry industry a powerful system designed with quick and easy setup in mind. This combination offers the first integrated software/hardware system built to evaluate the performance of the actual telemetry instrumentation system.

OMEGA-FIRE focuses on data acquisition hardware. It provides the airborne instrumentation community with a tool kit that enables users to minimize the complexity of the set-up process that is typically associated with telemetry ground processing systems and to quickly evaluate instrumentation systems without extensive programming.

### Logical Analyzer

Traditional PCM ground support systems require users to define PCM parameters prior to observing meaningful data. To transcend this laborious and error prone process, Wyle Laboratories' engineers created **OMEGA-FIRE**—an instrumentation analyzer that treats a PCM stream as a single entity. Literally, within seconds of connecting a PCM data source to the input port, OMEGA-FIRE is translating the signal to real-time data, which is logically organized in a two-dimensional, graphical representation of the input PCM frame. This means that users can immediately view real-time PCM data in raw and processed formats without going through time consuming setups.

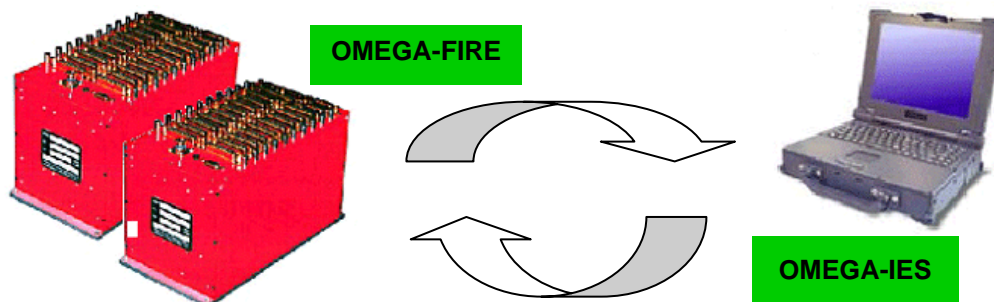
# OMEGA-FIRE

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## Advantages of OMEGA-FIRE

- Incorporates an elaborate PCM map display that functions as a basic real-time data display and provides a graphical interface for selecting specific PCM word locations for additional processing and display.
- Offers a collection of graphical displays that can be used to more closely evaluate data. Display types include: data versus time or strip chart displays, tabular and bar chart displays, and a synthetic voice display that provides eyes-off feedback of real-time data while adjusting input signals.
- Supports real-time data logging of selected PCM data channels directly to a Microsoft® Excel® file for additional data evaluation.
- Interfaces directly with PCM instrumentation systems via Wyle Laboratories' PCI-based Bit Synchronizer and Decommulator modules, the All-in-One board, and the PCM Data Brick.
- Shares a common database with the OMEGA-IES Instrumentation Set-up software and the OMEGA-SERV Ground Station Real-time Data Processing software.
- TTC instrumentation hardware users can even connect their instrumentation hardware to OMEGA-FIRE via the same RS-232C port, which is used for programming the system. This eliminates the cost of PCM Decommulation modules.

## Bottom Line—Productivity and Savings



OMEGA-FIRE and OMEGA-IES form the foundation of a complete flight-test instrumentation software system at a fraction of the cost of traditional portable PCM ground processing systems. With an emphasis on the requirements of the instrumentation engineer and test personnel, OMEGA-FIRE and OMEGA-IES offer unprecedented levels of productivity.

## Ordering Codes

- OMEGA-FIRE OMEGA-FIRE S/W License for Windows-based Quicklook Platform
- OMEGA-FARCH Optional Archive Module for OMEGA-FIRE
- OMEGA-FDWIZ Optional Custom Display Wizard for OMEGA-FIRE
- OMEGA-FPWIZ Optional Derived Processing Wizard for OMEGA-FIRE
- OMEGA-FVDEO Optional Video Module for OMEGA-FIRE
- OMEGA-FVOIC Optional Voice CVSD Module for OMEGA-FIRE