

SERIES 6700

SUPERIOR PERFORMANCE

EVERYTHING ELSE IS JUST NOISE



PACIFIC
INSTRUMENTS
A VPG Brand

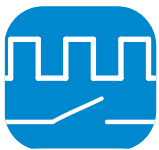
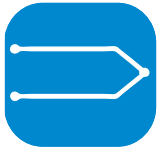
A VPG Brand
PACIFIC
INSTRUMENTS

PACIFIC INSTRUMENTS

HIGH SPEED D A S

SERIES 6700

HIGH ACCURACY DATA ACQUISITION



Introducing the Pacific Instruments Series 6700 High Performance Signal Conditioning and Data Acquisition System, the premier Data Acquisition solution on the market. Based on the widely adopted Pacific Instruments Series 6000 system, the Series 6700 elevates performance and accuracy to levels not previously available. Those who need the best data, choose the best data acquisition system.

6700U

19" Rack, 16-Slot,
Up to 512 Channels Per Enclosure,
Unlimited Channels Per System



24-bit $\Sigma\Delta$ with the Highest
Effective Number of Bits
on the Market

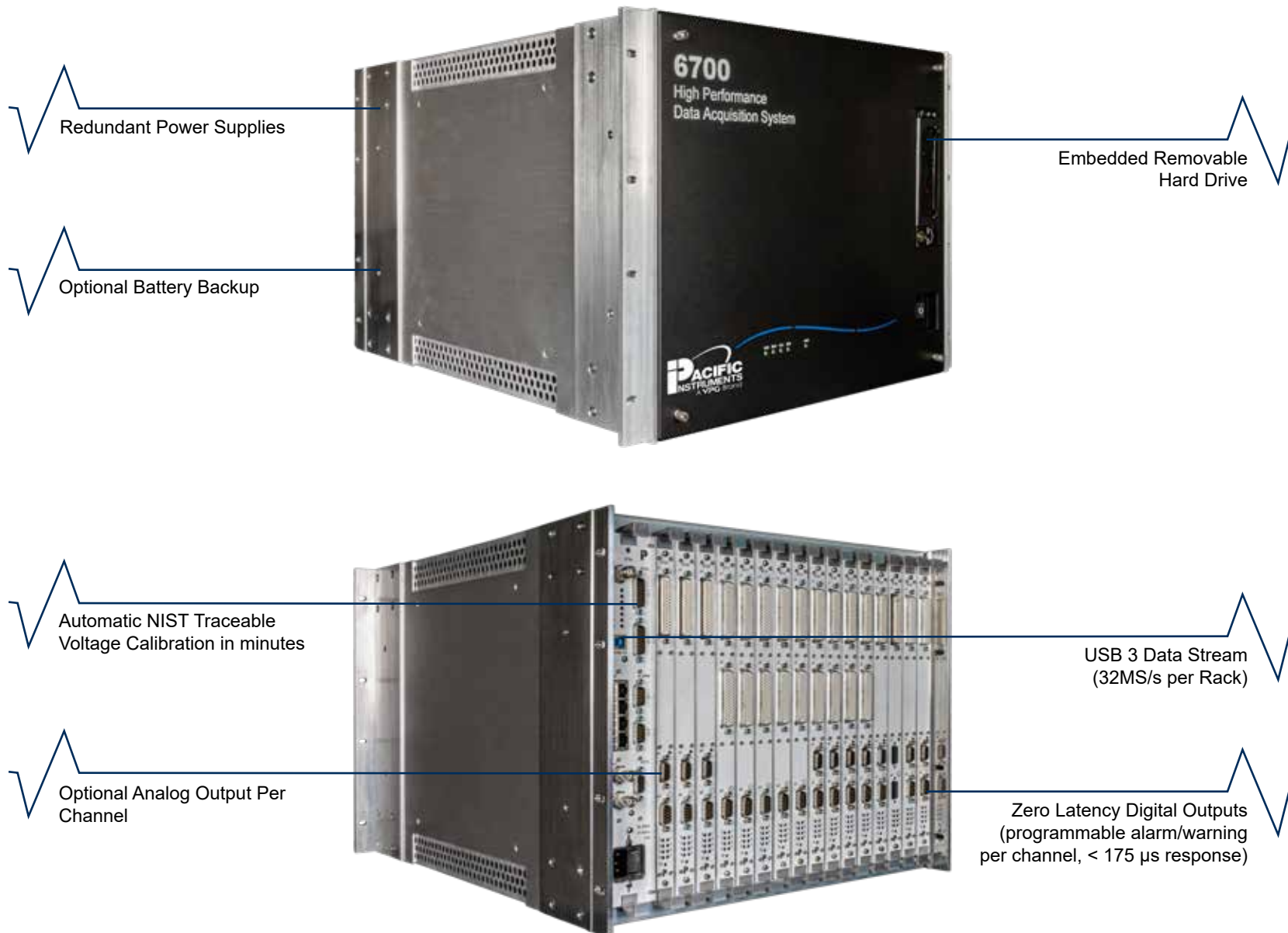
Independent Settings
per Channel: Sample Rate,
Input Type, Excitation, Filter,
Gain etc.

Real Time System
Control Capabilities

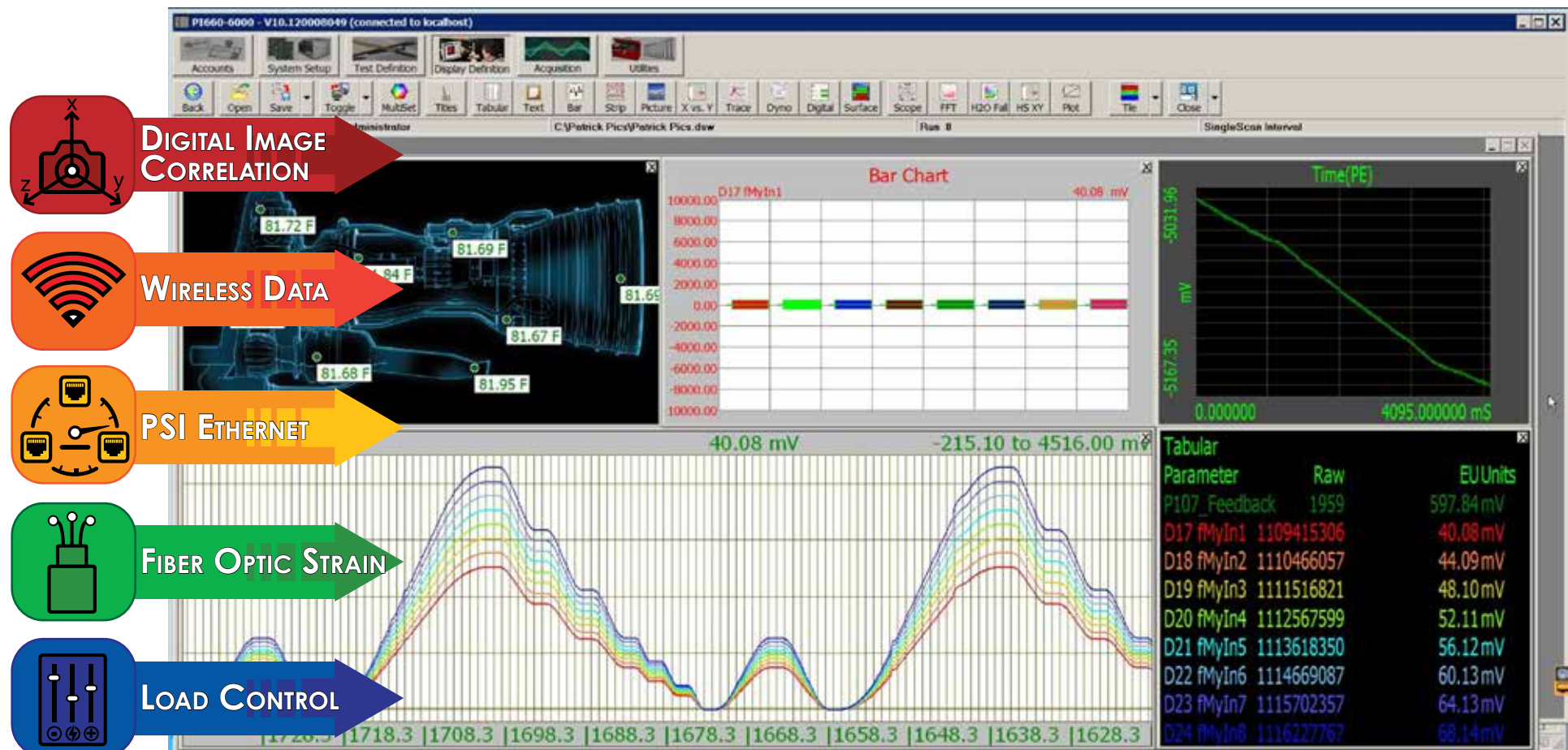
DESIGNED FOR CRITICAL APPLICATIONS

HIGH SPEED DAS SERIES 6700

Suited for a wide spectrum of testing needs such as full scale rocket engine, jet turbine engine, structural, wind tunnel and numerous other applications, the Pacific Instruments Series 6700 is designed to meet the most demanding test requirements.



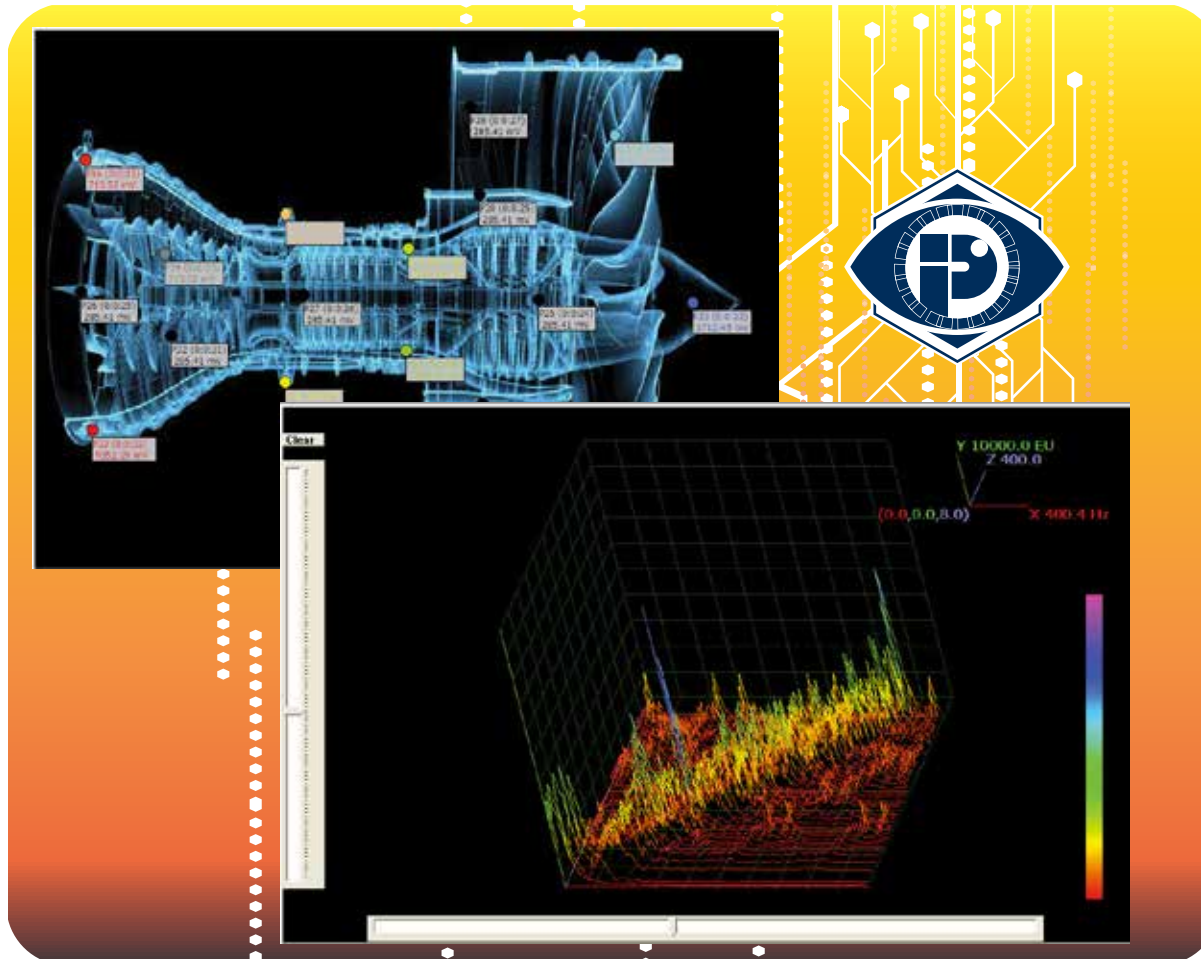
- Quick setup of any input type, any number of channels. Custom channel-to-channel configuration. Setup in minutes
- Combine 3rd party data streams from external sources (DIC, Fiber Optic Strain, Load Control Systems, PSI Pressure Systems, Wireless Sensors)
- One comprehensive, low cost software package, no add ons or hidden fees
- Widely adopted and praised by major Aerospace, Military, University customers worldwide. Save time, get Data!



PI660 - POWERFUL SOFTWARE, TURNKEY OR API

SERIES 6700

- Hardware and Software are both highly customizable by design to adapt to user demands.
- Stream Data to any PC on the Network in Real Time. Many network configurations available.
- Pacific Instruments PI660 Software is the choice of most Series 6700 users for test management, data acquisition, and data display.
- Ultimate flexibility - PI660 Turnkey, PI660 API for access to all existing features, Command Set for seamless integration into existing customer software environments.



PI-Watch

Phone app for mobile and easy system health checks





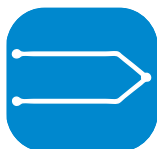
- Analog and digital I/O modules condition, amplify, filter and digitize signals from any input type
- All Series 6700 I/O Modules can be mixed and matched to meet test requirements and are easily changed as testing requirements change



- Two alarms with programmable upper & lower limits per channel
- Example Series 6700 I/O Modules:

**MODEL 6717****32-Ch Voltage / Thermocouple Amplifier-Digitizer**

- Sample up to 60ks/s per Channel
- Optional Thermocouple Reference Junction Box
- Mix High and Low Speed Channels

**MODEL 6739****8-Ch Voltage / Strain Bridge Transducer Amplifier-Filter-Digitizer**

- Sample up to 250ks/s per Channel
- Mix Static and Dynamic Strain Measurements
- Advanced Capabilities, Remote Sense, Remote Shunt etc.

**MODEL 6729****8-Ch Voltage / IEPE Amplifier-Filter-Digitizer**

- Sample up to 250ks/s per Channel
- Many Digital Filtering Options (256 TAP User Definable)



SPECIFICATION MATRIX

	PACIFIC 6700	PACIFIC 6000	COMPETITORS
INPUT TYPES	Voltage, Thermocouple (all types), Current, Position, RTD, Strain Gage, Pressure, Load, ICP/IEPE, Charge Mode, Flow, RPM, Period, Counter, Sequencer, Dig. IO, DSP Control	Voltage, Thermocouple (all types), Current, Position, RTD, Strain Gage, Pressure, Load, ICP/IEPE, Charge Mode, Flow, RPM, Period, Counter, Sequencer, Dig. IO, DSP Control	Varies by System
MAX CHANNELS PER SYSTEM	8,192 Analog Channels, synchronized to +/- 50nS 4,096 Calculated Channels	8,192 Analog Channels, synchronized to +/- 50nS 4,096 Calculated Channels	Varies
SAMPLE RATE	1 to 1MS/s per channel, Selectable per Channel	1 to 200ks/s per channel, Selectable per Channel	Limited selections between min and max, Set in groups of Channels
AGGREGATE SAMPLE RATE PER ENCLOSURE	32MS/s	4.8Ms/s	Varies
RESOLUTION	24-bit $\Sigma\Delta$ with 18 Effective Number of Bits	16 SAR with 14 Effective Number of Bits	24-bit $\Sigma\Delta$ with 11-14 Effective Number of Bits
# OF CHANNELS PER MODULE	8-32 Channels, fully programmable per Channel	8-32 Channels, fully programmable per Channel	Varies
FILTER	User Programmable Digital FIR with 8-9 Cut Offs, Selectable per Channel	Analog 1 Cut Off to fully Programmable from 4Hz to 30kHz and higher, Selectable per Channel	Limited, Set in groups of Channels
BRIDGE INPUTS	$\frac{1}{4}$, $\frac{1}{2}$, Full Bridge - 120, 350, 1K and more, software selectable per channel	$\frac{1}{4}$, $\frac{1}{2}$, Full Bridge - 120, 350, 1K and more, software selectable per channel	Varies and can be external
GAIN	1-5,000 Programmable per Channel	1-5,000 Programmable per channel	Limited, Set in groups of Channels
SENSOR EXCITATION	0-28V 100mA Max, 0-50mA @ 28V limit, Selectable per Channel	0-28V 100mA Max, 0-50mA @ 28V limit, Selectable per Channel	Limited, Set in groups of Channels



Signal Conditioning & Data Acquisition Designed, Manufactured and Supported in the USA since 1978

Integrated Conditioning, Acquisition & Control

High Speed Data Acquisition & Control Systems

Turnkey Acquisition Systems

Signal Conditioning Systems

Transient Recording Systems

Ethernet Data Acquisition Systems

Software: PI660, API, Customer Dev.

Customer Driven, Long Term Support

[pacificinstruments.com](https://www.pacificinstruments.com)