### SignalCalc Dynamic Signal Analyzers

SignalCalc analyzers help manufacturers around the world build better products faster and cheaper. From design to manufacturing, Signal-Calc supports the testing needs of R&D and Production engineers with intensive and scalable DSP power and comprehensive application coverage.

- General FFT Analysis
- Structural Analysis
- Balancing
- Rotating Machinery Diagnostics
- Turbomachinery Díagnostics
- Environmental Testing
- DropTest Analysis
- Acoustics

### SignalStar Vibration Control Systems

The industry standard just got better. SignalStar vibration controllers combine the power of a distributed DSP architecture and the acclaimed Data Physics control algorithms to deliver uncompromised control performance from 1 to 1000 channels. No matter what your testing needs, there is a matching vibration controller in the SignalStar family.

- Single and multi-shaker Control
- Random, Sine, Mixed Modes
- Shock , Transient, SRS
- Time Replication
- Multi Frequency Sine for Automotive Testing

### SignalForce Shakers & Accessories

The acquisition by Data Physics of Gearing & Watson, Ling Electronics, Kimball Industries, **Derritron Vibration Products and ACG Dynamics** means you have one-stop access to outstanding vibration testing solutions developed by trusted technology leaders in the industry. Finally, reliable shakers of superior design and performance, together with vibration controllers that offer higher control accuracy, all under one roof.

2 lbf to 50,000 lbf Shaker Range,

- including inertial and modal shakers
- Matching Power Amplifiers
- Slip Tables, Head Expanders & Fixtures
- Acoustic Power Generators for high energy Acoustic Testing

### Customers

At Data Physics, customers come first. We are passionate about our customers, and it is their needs that drive us to innovate and invent technologies for today's and tomorrow's world. Every Data Physics employee strives for excellence, taking personal ownership of customer issues, with a commitment to deliver exceptional performance. Our people are highly motivated and driven to succeed, whether working in close partnership with one another, or with distributors and suppliers.

Data Physics has been supplying high performance solutions in signal processing to the noise and vibration community for over 25 years. With the addition of a full line of electrodynamic shakers to complement its vibration controllers and dynamic signal analyzers, Data Physics is a total solution supplier for noise and vibration applications. Over 5000 Data Physics systems are installed worldwide at all leading Automotive, Aerospace, Military & Defense, Industrial, Consumer Electronics Manufacturers and Educational Institutions.

### Quality

Data Physics products are delivered on high performance electronics and highly engineered electromechanical devices. Designed and manufactured by Data Physics with Noise & Vibration applications in mind, the dedicated designs guarantee the highest performance possible.

Data Physics Corporation is ISO 9001:2008 certified, demonstrating the company's commitment to international standards for guality. The Data Physics guality system has been in compliance with ISO 9001 since 1998 and ISO 17025 since 2001. "Our goal has always been to meet customer requirements and exceed their expectations," says Dr. Sri Welaratna, President and CEO of Data Physics. "Our early ISO 9001:2000 certification demonstrates our commitment to customer satisfaction, employee involvement and continuous improvement."

Data Physics Corporation is located in San Jose, California with additional R&D and manufacturing facilities in Corona, California, Hamden, Connecticut, Paris, France, Hailsham, UK and sales and support centers in Germany, UK, China and India. One of the greatest factors of Data Physics' ongoing success in delivering breakthrough technology is its dedicated team of software and hardware engineers. technology is its dedicated team of software and hardware engineers.







# **Measure?**

# **Control?**

# Shake?



# Test & Measurement Solutions for Noise & Vibration Applications

### 1984 - 2009



# www.dataphysics.com

Solutions to Test and Measurement challenges from people who are driven by them.

SignalCalc<sup>®</sup> Dynamic Signal Analyzers

Ultra portable, rugged and USB 2.0 powered, it is the ACE complete solution for small channel count applications. With realtime analysis capability from DC to 94 kHz, it is an NVH engineer's dream machine.



 4 Input channels, 2 sources, 1 tachometer 120 dB dynamic range 40 kHz realtime rate (94 kHz optional)

# Mobilyzer



Portability with power and performance, it gives you precision well beyond the ordinary with up to 150 dB dynamic range. Realtime measurements on all channels while recording to disk at full bandwidth.

- 4-32 input channels, 2-8 sources
- 2-8 tachometer channels
- 49 kHz realtime rate
- (97 kHz optional)
- FFT, FRF, RT Octave, Order Tracking, MIMO, SRS and much more

# Savant

The analyzer for any test, no matter what size. The modular scalable architecture maintains realtime analysis regardless of channel count including recording to disk.



• 40-1024 channels or more • All standard measurements plus Sine Reduction and Stepped Sine

> Networked chassis can be rearranged freely

 Ideal for big applications like Normal Mode Analysis and Sine Data Reduction



Scalar An entry-level controller ideal for production testing. Intuitive graphical user interface simplifies test setup, execution, and report generation. Low cost without compromising control performance. 2 - 8 channels Random, Sine, Classical Shock Includes PC

• Fully upgradeable



-



The industry standard just got better. Combining the power of a distributed DSP architecture and

- Single axis

## Matrix

The controller to satisfy your most demanding needs. Delivering the acclaimed Data Physics control algorithms for multiple shakers and high channel count systems.

- Up to 1024 channels
- All control modes
- Single and multi axis • Up to 16 shakers



remote operation. 8-32 channels Random, Sine, Shock SRS, Mixed Modes

- Time Data Replication



• 2 lbf to 50.000 lbf Inertial, Modal & Permanent Magnet Air Cooled & Water Cooled Interchangeable armatures

55 years ago by Ling Electronics and

SignalForce<sup>®</sup> Shakers & Accessories

Shakers Continuing a tradition started more than

Gearing & Watson.

- Internal load support Head expanders & Fixtures
- Slip tables
- Isolation mounts
- Chamber Interfaces
- Powered by



- Linear Amplifiers
- Digital Switching Amplifiers
- Up to 95% efficiency
- Safety Interlocks ensuring protection of the test specimen, the shaker and the amplifier

# **Acoustic Power Generators**

- For High energy Acoustic Testing
- Can generate up to 10.000 Acoustic Watts
- Maximum Modulation Frequency: 1.2 kHz
- Suited for reverberation chambers and progressive wave tube operation
- Direct replacements for Ling EPT-200 and Ling EPT-1094
- Complemented by the SignalStar Acoustic Controlle

# Worldwide Shaker Service

Shaker Service centers in the UK and both coasts of the USA to serve users with fast economical maintenance and repair services including shaker systems manufactured by others.

