

Dual Bridge Load Cells

For Aerospace Applications

Highlights

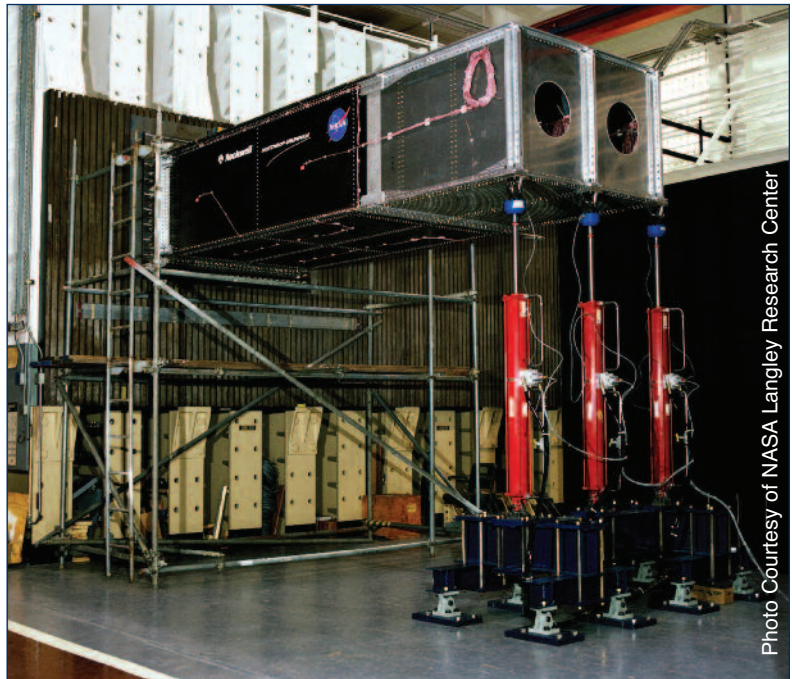
- Dual Bridge Output
- High Accuracy
- Temperature & Moment Compensation
- NIST Traceable, A2LA Accredited Calibration to ISO 17025

Applications

- Airframe Structural Test Applications
- Fatigue Testing
- Material Testing
- Rocket Thrust
- Weighing
- Process Monitoring



**PCB Load & Torque Series 1400
Dual Bridge Load Cell**
(Mounting Base is Included)



PCB Load & Torque, Inc., a wholly-owned subsidiary of PCB Piezotronics, manufactures a wide range of high-accuracy, strain gage load cells for aerospace, automotive, industrial, and process control applications.

Series 1400 includes a dual output feature that offers sensor redundancy and the ability to provide control feedback from one sensor while the other is used for data acquisition. These load cells are available in multiple ranges and have a NIST traceable, A2LA accredited calibration to ISO 17025, in both tension and compression directions. Additional features include low deflection, high accuracy and repeatability, thermal compensation and moment compensation.






Fatigue-rated load cells are specifically designed for durability testing machine manufacturers and users, or any application where high cyclic loads are present. Applications include material testing, component life cycle testing, and structural testing. All fatigue-rated load cells are guaranteed against fatigue failure for 100 million fully reversed cycles.

As with all PCB Load & Torque manufactured instrumentation, this equipment is complimented with toll-free application assistance, 24-hour customer support, and the industry's only commitment to Total Customer Satisfaction.

[Click Here To Learn More >>](#)

Dual Bridge Load Cell

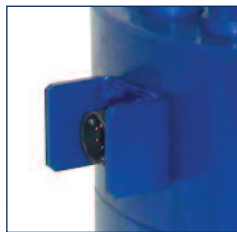
Dual Bridge Load Cells

					
Model Number	1403-05ADB	1404-02ADB	1404-03ADB	1408-02ADB	1411-02ADB
Measurement Range	5k lb / 22k N	12.5k lb / 56k N	25k lb / 111k N	50k lb / 222k N	100k lb / 445k N
Sensitivity	2 mV/V	2 mV/V	2 mV/V	2 mV/V	2 mV/V
Excitation Voltage - Max	20 VDC	20 VDC	20 VDC	20 VDC	20 VDC
Bridge Resistance	350 ohms	350 ohms	350 ohms	350 ohms	350 ohms
Non-Linearity	0.04 % F.S	0.05 % F.S	0.05 % F.S	0.05 % F.S	0.06 % F.S
Hysteresis	0.04 % F.S	0.05 % F.S	0.05 % F.S	0.05 % F.S	0.06 % F.S
Non-Repeatability	0.02 % F.S	0.02 % F.S	0.02 % F.S	0.02 % F.S	0.02 % F.S
Temperature Range	-65 to 200 F -53 to +93 C	-65 to 200 F -53 to +93 C	-65 to 200 F -53 to +93 C	-65 to 200 F -53 to +93 C	-65 to 200 F -53 to +93 C
Connector (2)	PT02E-10-6P	PT02E-10-6P	PT02E-10-6P	PT02E-10-6P	PT02E-10-6P
Mounting	5/8-18 Thread	1 1/4-12 Thread	1 1/4-12 Thread	1 3/4-12 Thread	2 3/4-8 Thread
Accessories					
Shunt Resistor	100-11176-30	100-11176-30	100-11176-30	100-11176-30	100-11176-30
Optional Accessories					
Cable	8311-01-10A	8311-01-10A	8311-01-10A	8311-01-10A	8311-01-10A
Connector Protectors	084A90	084A90	084A90	(2) Supplied	(2) Supplied
Lifting Eyebolt	—	—	—	—	080A40
Lifting Plug for Eyebolt	—	—	—	—	080A41
Pre-tension Stud	084A55	084A56	084A57	084A58	084A59

Accessories



Cable Assemblies



Connector Protectors
(Shown Installed)

Call today or visit
www.pcbloadtorque.com
for a complete line
of Load Cell products.



3425 Walden Avenue, Depew, NY 14043-2495 USA

Toll-Free in USA 866-816-8892

24-hour SensorLineSM 716-684-0001

Fax 716-684-0987 E-mail aerosales@pcb.com

Web Site www.pcb.com

AS9100 CERTIFIED ■ ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

© 2013 PCB Group, Inc. In the interest of constant product improvement, specifications are subject to change without notice. PCB, ICP, Modally Tuned, Spindler, Swiveler and TORKDISC are registered trademarks of PCB Group. SoundTrack LXT, Spark and Blaze are registered trademarks of PCB Piezotronics. SensorLine is a service mark of PCB Group. All other trademarks are property of their respective owners.

AD-DB-LOADCELLS-0413

Printed in U.S.A.

The **Aerospace & Defense** division of PCB Piezotronics serves the Turbine Engine, Helicopter Health and Usage Monitoring (HUMS), Ground Vibration Test, Flight Test, Wind Tunnel Test, Fuze/Safe and Arm, Spacecraft and Aerospace Systems design and development communities with sensors and associated signal conditioning for measurement of acceleration (vibration, shock and rigid body); acoustics; pressure; force; strain; and torque. Sensor technologies employed include piezoelectric, piezoresistive (both strain gauge and MEMS) and variable capacitive (both MEMS and microphone). Manufacturing operations are certified to AS9100:2004 and ISO 9001:2000, with calibration procedures accredited by A2LA to ISO 17025. Products can be manufactured to meet specific aerospace environmental standards, with program design requirements to meet RTCA-DO-160 and MIL-STD-810, and low outgassing designs available for specific applications.

Visit www.pcb.com to locate
your nearest sales office