

GE Sensing

Features

- Pneumatic full scale (FS) ranges to 10,000 psia (700 bara)
- Precision to 0.01% of range
- Stability 0.01% of range per year
- Up to three ranges available in one instrument
- Automates high pressure pneumatic calibrations
- Available in bench top or cart-mounted configurations
- FS pressure ranges of 6000 psi (415 bar) or 10,000 psi (700 bar)
- Triple scale option adds three ranges—single instruments cover a wider pressure range
- Improved control stability—0.007% FS
- Compatible with Intecal software for fully automated data acquisition of device under test (DUT)
- Optional pressure booster available for supply pressure requirement

The Model 7350 high pressure pneumatic controller provides a safe, easy to use and effective means of automating high pressure test and calibration of a wide range of pressure measuring devices. In control mode, these controllers simultaneously measure and control pressure, and can be used for the calibration and testing of pressure gauges, transducers, pressure switches and production pressure instruments.

Model 7350 Ruska High Pressure Pneumatic Controller

Model 7350 is a Ruska product. Ruska has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



Precision and Stability

The Model 7350 controller uses a quartz transducer for unmatched performance in conducting automated high pressure testing and calibration. Precision levels are 0.01% of FS for pressures to 10,000 psi (700 bar). Stability is 0.01% of FS per year, providing for an annual recalibration interval.

Automating High Pressure Test and Calibration

The Model 7350 features an easy-to-use, menu-driven user interface for straightforward, simple operation.

Step up/down—for calibrations where the increments are fixed intervals, enter a user-defined step value. The controller increases or decreases the pressure by the step amount with a single keystroke. No more lengthy keystroke sequences to program.

Sweep test—for simple exercising routines, as with dial gauges, enter a start value, a stop value and number of times to repeat the cycle. The controller automatically exercises the device under test prior to the calibration run.

Onboard programs—for frequently used or lengthy calibrations, the controller can store up to 20 user-defined programs/profiles with up to a total of 1000 steps in internal memory.

Computer interface—every controller is provided with both an RS232 and IEEE-488 interface, and the controller syntax follows SCPI protocol for easy programming. A LabVIEW® driver is also available.

Intecal Software—provides complete automation of pressure calibrations. A ready-to-use software package that interfaces with all Ruska controllers, along with popular digital multimeters to provide full, closed loop calibrations. Intecal also provides calibration management solutions by providing a printout of calibration results and performance analysis, and stores historical data.

Triple Range Option

All ranges can be supplied with the triple scale option to provide three ranges with a single sensor.

Full Scale	Triple Scale Ranges; psi (bar)		
	Low	Middle	High
6000 (415)	2000 (140)	4000 (280)	6000 (415)
10,000 (700)	3000 (200)	6000 (400)	10,000 (700)

Versatility to Handle Almost Any High Pressure Calibration

The Model 7350 high pressure controller is versatile enough to handle almost any type of high pressure calibration.

Pressure ranges—available in standard pressure ranges of 6000 or 10,000 psia (415 or 700 bara) FS.

Choice of media—clean, dry laboratory grade air or nitrogen.

Pressure units/scales—features two user-defined, programmable units of measure, and twelve standard units: inHg at 0°C, inHg at 60°C, kPa, bar, psi, inH₂O at 4°C, inH₂O at 20°C, inH₂O at 60°F, kg/cm², mmHg at 0°C or cmH₂O at 4°C

Head pressure—automatic correction for given head pressure differences

Zeroing—with a few keystrokes, the controller will automatically zero the sensor.

Protection of the device under test—set upper and lower pressure limits to ensure protection of the device under test

Options—the Model 7350 is an absolute instrument and includes a tare feature for simulated gauge mode operation. The following options are available:

- Triple scale option provides three ranges with single sensor
- Gas booster option

GE's high pressure controllers can easily automate your high pressure test and calibration workload. These controllers are easy to use, easy to maintain and have the reliability, the performance and the features that you want.

Model 7350 Specifications

General

Standard Pressure Ranges (FS, bara)

6000, 10,000 psia (415, 700 bara)

Tare Mode

Tare mode included for gauge calibrations

Display

Graphical vacuum fluorescent

Electrical Power

110 or 220 VAC ($\pm 18\%$), 50/60 Hz, single phase

Operating Temperature

41°F to 122°F (5°C to 50°C)

Storage Temperature

-4°F to 158°F (-20°C to 70°C)

Humidity

5 to 95% relative humidity, non-condensing

Dimensions (h x w x d)

17 in x 19 in x 24 in (43 cm x 49 cm x 61 cm)

Weight

120 lb (54.5 kg)

Performance

Precision

0.01% of range; to 10,000 psi (700 bar)

Stability

0.01% of range, per year

Control Stability

0.007% maximum FS for load volume 3 to 35 in³ (7.5 to 89 cm³); control low limit is 10% of maximum FS pressure

Warm Up Time

30 minutes, may be left on indefinitely

Pressure Medium

Dry, clean air or nitrogen

Supply Pressure

10% above FS pressure range (may require optional external gas booster system), 100 to 110 psi (7 to 7.5 bar) industrial grade (shop) air for controller operation

Pneumatics

Pneumatic Ports

- Test port: 1/8 in NPT
- Supply pressure port: 1/8 in NPT
- Air supply: 1/4 in NPT

Overpressure Protection

- Relief valves test port set at 110% FS
- Supply pressure port set at 120% FS
- Software limits (set by user)

Communications

- RS232 and IEEE-488
- Syntax: SCPI
- Ruska Series 6000 emulation
- LabVIEW driver available—free at www.gesensing.com
- MET/CAL[®] driver available
- Intecal software available

Calibration

A calibration report providing traceability to the National Institute of Standards and Technology (NIST) is provided with each instrument. NVLAP accredited calibration to ISO 17025 is available as an option.

Recommended calibration interval is one year.

Options

- Triple scale
- Intecal software
- Gas booster

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Other Products and Services

GE manufactures a range of deadweight gauges for pressures from 0.2 to 72,500 psi (14 mbar to 5000 bar) and digital pressure controllers from 1 to 40,000 psi (25 mbar to 2750 bar), air data test sets, and portable pressure indicators. GE also offers mass-sorption systems (McBain-Bakr apparatus) and custom quartz component design and manufacturing. Repair and recalibration services are available to support our equipment worldwide. Regular training courses are held in Houston, Texas, for all GE products.



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