

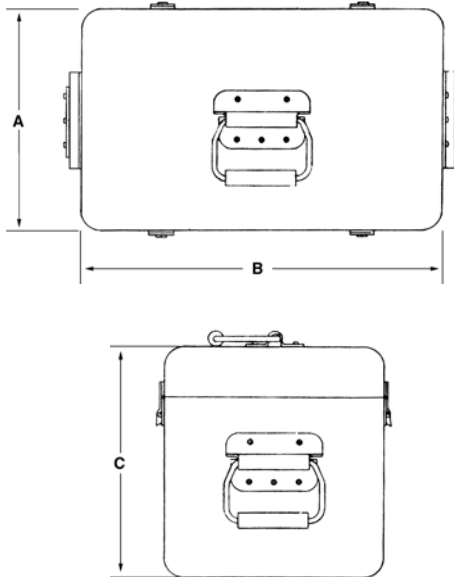
# UPC5200/UPC5210 High Pressure Calibration Standard



UPC5200



UPC5210 - 19 inch wide rack-mountable version of UPC5200



UPC5210 (not shown) dimensions—excluding front handles: 19 W x 8.1 D x 10.5 in. H (482.6 W x 205.74 D x 266.7 mm) Rack-mount dimensions are for reference only. Consult factory for cutout dimensions.

UPC5200 OVERALL DIMENSIONS	
A	11.0 in. (279.40 mm)
B	18.0 in. (457.20 mm)
C	11.5 in. (292.10 mm)

## STANDARD FEATURES

- Available in enclosure with carrying handles (UPC5200) or 19 inch wide rack-mountable version (UPC5210)
- Two sets of ranges to choose from: 10,000/5000/2000 psi and 5000/2500/1000 psi
- Three independent selectable ranges in each instrument
- ±0.05% F.S. accuracy of each independent selectable range
- Available with Light Emitting Diode (LED) or Liquid Crystal Display (LCD)
- Pressure display resolution 0.02% F.S. typical for each range
- Different technicians can calibrate the same Device-Under-Test and get identical results... every time
- Electronically controlled 10:1 intensifier system—Easy to operate, training can be accomplished in 10 minutes
- Easy to carry - approximately 51 lb
- Adjustable overpressure protection above input pressure
- Precision pressure vernier control
- Voltage/current display mode for transducer testing
- 32 VDC excitation output
- Non-destructible, finger tip control micro-metering valves for pressure control
- Automatic pushbutton calibration, microprocessor controlled and maintained
- Quick-disconnect fitting and hose included
- Pneumatic only - no hydraulics or distilled water messes
- External portable pressure cylinder included with UPC5200
- Calibration Certificate included - traceable to the National Institute of Standards and Technology (NIST)

## APPLICATIONS

- Any high-pressure, pneumatic-only application
- Initial test of high-pressure hydraulic systems
- Boiler feed pressure for power plants

## SPECIFICATIONS

### Available Calibration Modes:

Gauge

### Overall Accuracy:

±0.05% F.S. maximum. Accuracy statement includes all effects of linearity, hysteresis, repeatability and ambient temperature.

### Power:

115 or 230 VAC 50/60 Hz

### Temperature Range:

Operating: 40°F to 140°F (4°C to 60°C)  
Storage: 0°F to 185°F (-17°C to 85°C)  
Relative humidity: 95%, non-condensing

### Pressure Media:

Clean dry gaseous nitrogen, standard

### External Pressure Cylinder Supplied:

Capacity: 88 standard cubic feet  
Volume: 960 cubic inches  
Rating: 2216 psi

### Regulated Pressure Gauge:

Size: Two and one half-inch diameter  
Range: 0-1500

### Pressure Media Filter:

Rating: 7 microns, nominal  
Type: Field replaceable filter cartridge contained within a stainless steel outer case

### Control Valves:

Type: Micro-metering with positive shut off, adjustable stop and replaceable seat, non-destructible  
Material: 300 series stainless steel outer body

### Internal Piping:

Tubing: 1/4 in. O.D. and 1/8 in. O.D., 300 series stainless steel, seamless  
Couplings: 300 series stainless steel Swagelok®

### Output Test Port:

Style: Quick-disconnect type  
Pressure Rating: 10,000 psig minimum, connected or disconnected

### Pressure Hoses:

Quantity supplied: Two; one input and one output  
Length: 4 feet, nominal

### Vernier Control:

Vernier Volume: 0.4 cubic inch, nominal  
Vernier Mechanical Rotation: 15 turns, nominal  
Adjustable Sensitivity: 0.005 psi, minimum

### Booster Pump Solenoid Valve:

Type: Three-way, normally closed, electronically controlled  
Pressure Rating: 1500 psig  
Power Requirements: 115 or 230 VAC, 50/60 Hz, 10 watts

### Accumulator Gauge:

Size: Two and one half-inch diameter  
Range: 0-15,000 psi

### Input Pressure Regulator:

Pressure Rating: 3000 psig maximum  
Output Pressure Range: 0-1000 psi  
Construction: Self-relieving, single stage regulator

### UPC5200 Internal Pressure Sensor:

Type: Bonded, metal foil strain gauge or equal  
Sensitivity: 3 mV/V, nominal  
Construction: Completely weld sealed stainless steel outer body and pressure cavity

### External Carrying Case:

Type: Deep-drawn aluminum case with cover and carrying handles  
Material Thickness: 0.090 in. nominal  
Finish: Grey polyurethane baked-enamel paint, textured finish

### Current Display:

0-20,000 mA counting by 0.005 mA

### Weight:

UPC5200: 51 lb (23.1 kg) including all hoses and cables  
External cylinder 5 lb (2.26 kg)

# UPC5200/UPC5210 High Pressure Calibration Standard

## MODEL/PRICE

MODEL	DESCRIPTION	EST. SHIP WEIGHT	PRICE
UPC5200	Portable High Pressure Calibrator (NIST Traceable)	58 lb	Consult
UPC5210	19 in Rack-Mount High Pressure Calibrator (NIST Traceable)	58 lb	Consult

**UPC5200/UPC5210 Model Numbering Guide**  
 UPC5200/UPC5210 ( ) ( ) ( ) ( )

**RANGE**

- A = 10,000/5000/2000 psi, 115 VAC 50/60 Hz
- B = 5000/2500/1000 psi, 115 VAC 50/60 Hz
- C = 10,000/5000/2000 psi, 230 VAC 50/60 Hz
- D = 5000/2500/1000 psi, 230 VAC 50/60 Hz

**CALIBRATION MODE**

- A = Gauge only

**DISPLAY**

- A = Standard, Light Emitting Diode (LED)
- B = Liquid Crystal Display (LCD)

**Determine model configuration before ordering**  
**Example: UPC5200AAA = UPC5200 (A)10,000/5000/2000 psi, 115 VAC 50/60 Hz, (A) gauge only, (A) LED**

## OPTIONS/ACCESSORIES

PART #	DESCRIPTION	PRICE
58478	Pressure trap (UPC5200/UPC5210) Literature sheet PN 58596	Consult
63259	Additional operating and maintenance manual	Consult
59533	Additional external pressure cylinder with (83.3 cu ft. 3694 psi test pressure) CGA-580 shutoff valve/internal rupture disk and carrying handle	Consult
55542	Standard quick-disconnect test port (output) fitting male plug on one end and 7/16-20 37 DEG (AN-4) JIC male on opposite end w/ internal 40 micron filter, 11000 PSI working pressure (Requires one Cheat Seal 54854)	Consult
151017	Test port (output) quick-disconnect adapter male coupling body, other end 1/4-18 NPT female SST with 40 micron filter, 11000 PSI working pressure	Consult
55280	Additional test port (output) 4-1/2 ft. long hose with quick-disconnect (SST) plug on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
131096	Additional test port (output) 10 ft. long hose with quick-disconnect (SST) plug on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
78939	Additional fill port (input) 5 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
55366	Additional fill port (input) 10 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
55369	Additional fill port (input) 15 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
162561	Additional fill port (input) 20 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
150613	External Cylinder Fill 5 ft. long hose with CGA-580 Type Male Nipple Both Ends 0-3000 PSI Working Pressure (Used For Filling External Pressure Cylinder PN 59533)	Consult
60109	Calibration Module	Consult



59533



151017



58478



55542

CALIBRATION STANDARDS