

# UPC5200/UPC5210

## High Pressure Calibration Standard



UPC5200

**Please refer to price pages for part numbers and part numbering guide.**

Providing sophisticated performance in high-pressure applications, the durable UPC5200 is the most effective pressure calibration standard in its class.

The UPC5200 excels in applications presenting pressure levels up to 10,000 psi. Featuring automatic pushbutton calibration, this unit guarantees 0.05% accuracy in three switch-selectable ranges. The exclusive patented precision pressure Orion 3A vernier provides infinite control to obtain exact pressure readings, while a reliable overpressure regulator protects units under test from permanent damage.

The fully-pneumatic UPC5200 is powered by nitrogen and eliminates the mess and oil thermal equilibrium problems common to hand pump hydraulic systems. Clean operation makes this calibrator ideal for use in aerospace, food and beverage, and general industry. The UPC5200 is easy to operate and training can be accomplished in as little as 10 minutes. Different technicians can calibrate the same transmitter and get identical results...every time.

For special high-pressure applications, the UPC5200 provides the ultimate in dependable, high-precision performance.

### Applications

- Any high-pressure, pneumatic-only application
- High pressure "oxygen compatible" instrument
- Initial test of high-pressure hydraulic systems
- Boiler feed pressure for power plants

### Standard Features

- Available in enclosure with carrying handles (UPC5200) or 19" rack mounted 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
- Pushbutton calibration guarantees  $\pm 0.05\%$  F.S. accuracy for each range
- Available with Light Emitting Diode (LED) or Liquid Crystal Display (LCD)
- Pressure resolution on 0.02% F.S. typical for each range
- Different technicians can calibrate the same transmitter 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 pressure cylinder included with unit

### Options/Accessories

- 58478 .....Pressure trap (UPC5200)  
Literature sheet PN 58596
- 63259 .....Additional operating and maintenance manual
- 59533 .....Additional external pressure cylinder with (83.3 cu ft, 3694 psi test pressure) CGA-580 shutoff valve/ internal rupture disk and carrying handle



UPC5210 Rack Mounted Version of UPC5200

**AVAILABLE PRESSURE CALIBRATIONS:**

Gage

**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° to 85° C)  
Relative humidity: 95%, non-condensing

**PRESSURE MEDIA:**

Nitrogen

**EXTERNAL PRESSURE CYLINDER SUPPLIED:**

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

**REGULATED PRESSURE GAGE:**

Size: 2.5"  
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" O.D. and 1/8" O.D., 300 series stainless steel, seamless  
Couplings: 300 series stainless steel swagelock

**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', nominal

**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 GAGE:**

Size: 2.5" 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 gage 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" nominal  
Finish: Grey polyurethane baked enamel paint, textured finish

**CURRENT DISPLAY:**

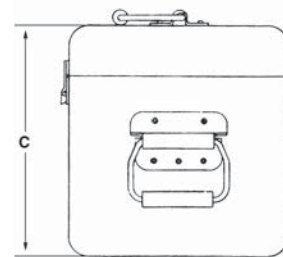
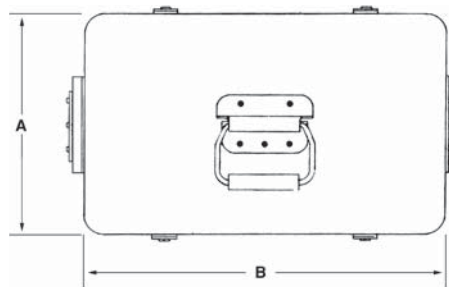
0-20.000 mA counting by 0.005 mA

**WEIGHT:**

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

**UPC5200 OVERALL DIMENSIONS**

A = 11" (279.40 mm)      C = 11.5" (292.10 mm)  
B = 18.0" (457.20 mm)



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

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