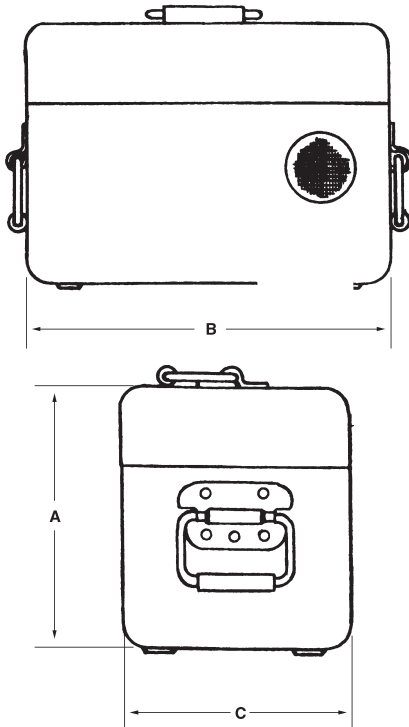


# UPC5000/UPC5010 Pressure Calibration Standard



Cover provides convenient storage of hoses and fittings.



UPC5010 (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 H)

Rack-mount dimensions are for reference only. Consult factory for cutout dimensions.

UPC5000 OVERALL DIMENSIONS	
A	11.5 in (292.10 mm)
B	16.0 in (406.40 mm)
C	10.0 in (254.00 mm)

## STANDARD FEATURES

- Available in self-contained enclosure with carrying handles (UPC5000) or 19 inch wide rack-mountable version (UPC5010)
- Six sets of ranges to choose from: 2000/1000/400 psi, 1000/500/200 psi, 500/250/100 psi, 100/50/20 psi, 50/25/10 psi, and 15/7.5/3 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
- State-of-the-art push button calibration - No analog potentiometers or adjustments required
- Lightweight, less than 33 pounds
- Adjustable overpressure protection
- Precision pressure vernier control
- Self-contained 2215 psi nitrogen cylinder
- Voltage/current display mode for transducer testing
- Supplies DC loop power
- Non-destructible, finger tip control micro-metering valves for pressure control
- Quick-disconnect fitting and hose included
- Different technicians can calibrate the same Device-Under-Test and get identical results... every time
- Calibration Certificate included - traceable to the National Institute of Standards and Technology (NIST)
- Pneumatic only - no hydraulic fluid or distilled water messes

## APPLICATIONS

- Engine test
- Food processing
- Pneumatic system checks
- Aircraft manufacturing, government laboratories, oil industry, electric power plants (nuclear and fossil), and general industry

## SPECIFICATIONS

### Available Calibration Modes:

Gauge, absolute or gauge and absolute

### 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 and 12 volt, rechargeable internal, sealed lead acid battery, standard

### 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

### Internal Pressure Cylinder:

Capacity: 7.0 standard cubic feet  
Volume: 80 cubic inches  
Rating: 2215 psi

### Pressure Supply Gauge:

Size: Two-inch diameter  
Range: 0-3000 psig

### Overpressure Rupture Disc:

Rating: 3000 psig, nominal  
Material: Stainless steel outer case

### Pressure Media Filter:

Rating: 7 microns, nominal  
Type: Field replaceable filter cartridge

### Control Valves:

Type: Micro-metering with positive shut off, adjustable stop and replaceable seat, non-destructible  
Material: Aluminum/stainless steel

### Internal Piping:

Tubing: 1/8 in. O.D., 0.028 in. wall thickness, copper, seamless  
Couplings: Brass Swagelok®

### Fill and Test Ports:

Style: Quick-disconnect type  
Fill Port Pressure Rating: 3000 psig connected, 2000 psig disconnected  
Test Port Pressure Rating: 5000 psig

### Pressure Hoses:

Quantity supplied: Two; one input and one output  
Length: 5 feet, nominal

### Vernier Control:

Volume: 0.25 cubic inches  
Vernier Mechanical Rotation: 16 turns, nominal  
Adjustable Sensitivity: 0.0005 psi, minimum  
Material: Aluminum/stainless steel

### Pressure Limit Monitor Gauge:

Size: Two-inch diameter  
Range: As appropriate for UPC5000/UPC5010 model range utilized

### Pressure Limit Control:

Pressure Rating: 3000 psig maximum (inlet)  
Output Pressure Range: As appropriate for UPC5000/UPC5010 model range utilized  
Construction: Self-relieving, single stage regulator

### 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

### UPC5000 External Carrying Case:

Type: Aluminum case with cover and carrying handle  
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:

UPC5000: Less than 33 lb (14.9 kg) including all hoses and cables

# UPC5000/UPC5010 Pressure Calibration Standard

## MODEL/PRICE

MODEL	DESCRIPTION	EST. SHIP WEIGHT	PRICE
UPC5000	Portable Pressure Calibrator LED (NIST Traceable)	38 lb	Consult
UPC5000	Portable Pressure Calibrator LCD (NIST Traceable)	38 lb	Consult
UPC5010	(19 in rack-mount version of UPC5000)	38 lb	Consult

**UPC5000/UPC5010 Model Numbering Guide**

UPC5000/UPC5010 ( ) ( ) ( ) ( )

**POWER**

- A = 115 VAC, 50/60 Hz (UPC5010 only)
- B = 115 VAC, 50/60 Hz & internal rechargeable battery
- C = 230 VAC, 50/60 Hz (UPC5010 only)
- D = 230 VAC, 50/60 Hz & internal rechargeable battery

**RANGE**

- A = 2000/1000/400 psi
- B = 1000/500/200 psi
- C = 500/250/100 psi
- D = 100/50/20 psi\*
- E = 50/25/10 psi\*
- J = 15/7.5/3 psi\*\*

**CALIBRATION MODE**

- A = Gauge only
- B = Absolute only
- C = Gauge or Absolute

**DISPLAY**

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

**Determine model configuration before ordering**

**Example: UPC5000BDAA = UPC5000 (B)115 VAC 50/60 Hz & internal rechargeable battery, (D)100/50/20 psi, (A) gauge only, (A) LED**

\* Available in gauge only or absolute only calibration modes

\*\* Available as gauge only unit



58483



55394 or 130239



60242



107288

55294 - NO TOOLS REQUIRED

## OPTIONS/ACCESSORIES

PART #	DESCRIPTION	PRICE
58483	Pressure trap (UPC5000/UPC5010) Literature sheet PN 58609	Consult
55354	Rechargeable battery kit	Consult
63256	Additional operating and maintenance manual	Consult
55294	Test port quick-disconnect male coupling body with 1/4 NPT female swivel (finger tighten to DUT, no tools required)	Consult
55394	Standard test port quick-disconnect fitting, male coupling body/female 1/4 NPT, 5000 psig working pressure (for mating between DUT, Hand-Held or Digital Gauge and UPC5000 or Source 3000 (PN 65315))	Consult
130239	Test port quick-disconnect fitting, male coupling body/female 1/8 NPT, 6500 psig working pressure (for mating between DUT, Hand-Held or Digital Gauge and UPC5000 or Source 3000 (PN 65315))	Consult
55279	Additional test port (output) 5 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end.	Consult
55300	Additional test port (output) 10 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end..	Consult
55304	Additional test port (output) 15 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end.	Consult
55310	Additional test port (output) 20 ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end.	Consult
57716	Fill port quick-disconnect female coupling body to 1/4 NPT Female	Consult
55282	Additional fill port (input) 5 ft. long hose fitted with quick-disconnect plug (brass) on one end and 1/4 inch 37° female AN swivel coupling on the other end.	Consult
55313	Fill port (input) 10 ft. long hose fitted with quick-disconnect plug (brass) on one end and 1/4 inch 37° female AN swivel coupling on the other end	Consult
55319	Fill port (input) 15 ft. long hose fitted with quick-disconnect plug (brass) on one end and 1/4 inch 37° female AN swivel coupling on the other end.	Consult
55322	Fill port (input) 20 ft. long hose fitted with quick-disconnect plug (brass) on one end and 1/4 inch 37° female AN swivel coupling on the other end	Consult
60109	Calibration Module	Consult
107288	Output (test) port quick-disconnect adjustable adapter assembly, male coupling body to Female quick-disconnect swivel other end, 3000 psig working pressure (for placing between Test Port and Pressure Trap (PN 58483) to allow Trap input/output to be parallel with UPC5000 front panel)	Consult
60242	Adapter fitting, for fill port hose, one end 1/4 inch male NPT and 7/16-20 male AN on the other end. 4000 psi working pressure (for connecting fill port hose to CGA-580 Inlet Connector)	Consult

CALIBRATION STANDARDS