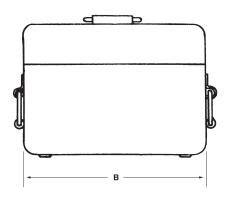
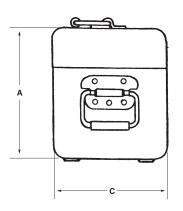
# UPC5100/UPC5110 Low Pressure/Vacuum Calibration Standard



UPC5100





UPC5110 (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.

UPC5100 OVERALL DIMENSIONS				
Α	11.5 in (292.10 mm)			
В	16.0 in (406.40 mm)			
С	10.0 in (254.00 mm)			

## STANDARD FEATURES

- Available in self-contained enclosure with carrying handles (UPC5100) or 19 inch wide rack-mountable version (UPC5110)
- Five independent selectable ranges in each instrument ±0-28 inHg, ±0-387 inH20, 0-2771 inH20, ±0-96 kPa, 0-100 PSI
- Available with Light Emitting Diode (LED) or Liquid Crystal Display (LCD)
- Pressure/Vacuum display resolution 0.02% F.S. typical for each range
- ±0.05% F.S. accuracy for each range
- State-of-the-art push button calibration No analog potentiometers or adjustments required
- Different technicians can calibrate the same Device-Under-Test and get identical results... every time

- Easy to operate, training can be accomplished in 10 minutes
- Lightweight less than 35 pounds
- · Adjustable overpressure protection
- · Precision vernier control
- Self-contained nitrogen cylinder and vacuum converter provides 27 inches Hg (w/out external pump) to 100 psi
- Voltage/current display mode for transducer testing
- · Quick-disconnect fitting and hose included
- Pneumatic only no hydraulic fluid or distilled water messes
- Calibration Certificate included traceable to the National Institute of Standards and Technology (NIST)

## **APPLICATIONS**

 Aircraft manufacturing, government laboratories, oil industry, electric power plants (nuclear and fossil), and general industry

- Pharmaceutical validation and calibration
- · Bio-medical quality assurance
- · Condenser vacuum

## **SPECIFICATIONS**

#### **Available Calibration Modes:**

Gauge and vacuum

# Overall Accuracy:

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

#### **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 or clean dry air

#### **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: 5/32 in. nylon tubing, 1/8 in. copper Fittings: Brass

## Test Port:

Style: Quick-disconnect type
Pressure rating: 600 psi maximum, connected or
disconnected

## Pressure Hose:

Quantity supplied: 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: 160 psi

Pressure supply gauge: 3000 psi

Regulator: 100 psi max

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

### **UPC5100 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

## **Vacuum Converter:**

Capable of generating 27 inches Hg vacuum stand alone or 30 inches Hg with external vacuum pump

## Weight:

UPC5100: Less than 35 lb (15.9 kg) including all hoses and cables

# UPC5100/UPC5110 Low Pressure/Vacuum Calibration Standard

# **MODEL/PRICE**

MODEL	DESCRIPTION	EST. SHIP WEIGHT	PRICE
UPC5100	Portable Low Pressure/Vacuum Calibrator (NIST Traceable)	35 lb	Consult
UPC5110	19 in Rack-Mount Low Pressure/ Vacuum Calibrator (NIST Traceable)	35 lb	Consult

UPC5100/UPC5110 Model Numbering Guide UPC5100/UPC5110 ()()
A = 115 VAC, 50/60 Hz (UPC5110 only) B = 115 VAC, 50/60 Hz & rechargeable internal battery C = 230 VAC, 50/60 Hz (UPC5110 only)
D = 230 VAC, 50/60 Hz & rechargeable internal battery
DISPLAY  A = Light Emitting Diode (LED)  B = Liquid Crystal Display (LCD)
<b>Determine model configuration before ordering Example: UPC5110AA = UPC5110 (A)</b> 115 VAC 50/60 Hz, <b>(A)</b> LED



60195



## **OPTIONS/ACCESSORIES**

PART # DESCRIPTION		
58487	Pressure trap (UPC5100/UPC5110) Literature sheet PN 58621*	Consult
55354	Rechargeable battery kit	Consult
55291	Test port quick-disconnect with 1/4 NPT female (finger tighten to DUT, no tools required)	Consult
60195	Standard test port quick-disconnect hose fitting male coupling body to 1/4 in. NPT female	Consult
63257	Additional operating and maintenance manual	Consult
55281	Additional test port (output) 5 ft. long hose with quick- disconnect plug (brass) on one end and 1/4 in. 37° female AN swivel tube coupling on the other end	Consult
55328	Additional test port (output) 10 ft. long home with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end.	Consult
55336	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
55341	Additional text 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 in. 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 SN swivel coupling on the other end	Consult
55322	Fill port (input) 20 ft. long hsoe 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
167474	Output (test) port quick-disconnect adjustable adapter assembly, male coupling body to Female quick-disconnect swivel other end, 100 psig working pressure (for placing between Test Port and Pressure Trap (PN 58487) to allow Trap input/output to be parallel with UPC5100 front panel)	Consult

<sup>\*</sup> For units prior to S/N A1300 use literature sheet PN 58627



55291 - "NO TOOLS REQUIRED"

