

UPS3000/UPS3110/UPS3210



Digital Pressure Standard



UPS3000

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

Rugged construction and smart features qualify the UPS3000 series digital pressure indicators as the quickest, most cost-effective calibration solution available.

Designed for use in the manufacture, test or calibration of pressure sensitive devices, the UPS3000 series incorporates an exclusive bonded foil strain gage sensor and microprocessor-based electronic circuitry for long-term stability. In addition, each model offers three independent ranges for accuracy within 0.05%.

Housed in a durable, steel enclosure, the UPS3000 series remains compact and lightweight for a balance of long lasting, portable use. The self-contained rechargeable battery option guarantees over six hours of convenient operation wherever your work takes you.

From pressure switches to burst discs, relief valves to transmitters, the UPS3000 series promises years of dependable performance at an affordable price.



UPS3110 - Rack Mounted Version of UPS3000 plus precision valve assembly and vernier, pressure limit monitor, test port, and test hose.



UPS3210 - Rack Mounted Version of UPS3000

Applications

- Transfer standard
- Pressure monitor
- Pressure switch testing
- Relief valve testing

Standard Features

- Available in 10 models: 30,000/15,000/6000 psi, 20,000/10,000/4,000 psi, 10,000/5000/2000 psi, 5000/2500/1000 psi, 2000/1000/400 psi, 50/25/10 psi, 1000/500/200 psi, 500/250/100 psi, 100/50/20 psi, 15/7.5/3 psi
- Three independent selectable ranges in each instrument
- Pushbutton calibration guarantees 0.05% F.S. accuracy for each range
- Different technicians can calibrate the same transmitter and get identical results...every time
- Portable
- 16 gage mild steel case
- No potentiometers or analog adjustments for calibration
- Pushbutton zero
- 0.02% F.S. resolution
- Absolute or gage switch selectable calibration modes
- Multi-conversion unit with 10 conversions standard: inH₂O, mmHg, inHg, kPa, BAR, mBAR, cmH₂O, Kg/cm², and % F.S.
- Table top, panel mount, or 19" rack available

Options/Accessories*

- 57775 Peak hold (UPS3000 only)
 - 57778 Freeze mode (UPS3000 only)
 - 57785 0-10 VDC analog output (UPS3000 only)
 - 57788 RS-232 simplex output (UPS3000 only)
 - 57790 Min/Max feature (UPS3000 only)
 - 55576 Interface to APC4000 (UPS3000 only)
 - 19297 Panel mount adapter kit (UPS3000 only)
 - 55844 Spare battery (UPS3000 only)
 - 58478 UPS3110 Pressure traps (above 5000 psi operation)
 - 58483 UPS3110 Pressure traps (above 100 to 5000 psi operation)
 - 58487 UPS3110 Pressure traps (100 psi & below operation)
 - 23113** ... TMU295 ticket printer
 - 31278** ... TM-300 tape printer
 - 15547 25-pin interface cable
 - 63253 Additional operating manual
- * Some option combinations are not available. Please consult factory for these combinations.
** Consult factory for printer specifications.

AVAILABLE PRESSURE CALIBRATION:

Gage, absolute, or gage and absolute

OVERALL ACCURACY:

±0.05% F.S. maximum each range. 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:

Any media compatible with 17-4PH stainless steel

PRESSURE SENSOR TYPE:

Bonded, metal foil strain gage or equal

PRESSURE CONNECTION:

Pressure fitting: 7/16-20UNF-2A: 37° flare; AN-4 20,000 psi unit and 30,000 psi unit; Autoclave AE F250-C

OVERPRESSURE CAPABILITY:

750% on low range

300% on mid range

150% on high range

NUMERICAL PRESSURE DISPLAY:

Digital Type: High intensity, red LED, 0.43" high

Active Digits: Five full decades

Polarity Indication: "—" sign

PRESSURE TO DIGITAL CONVERSION:

Conversion rate: Data updated at the rate of 12 times per second, nominal

Display Resolution: Nominally 0.02% of F.S. for each pressure range

INPUT VOLTAGE:

115 or 230 VAC, ±10%, 50/60 Hz voltage selected via transformer taps

POWER CONSUMPTION:

8 watts, typical

LINE FILTER:

Line to line and line to neutral

MOUNTING STYLES:

Table top with rubber feet, panel mounted with adapter kit, or 19" rack mount

CONSTRUCTION:

Single piece outer case with slide out drawer

CASE MATERIAL:

16 gage, mild steel with textured finish, baked epoxy enamel paint

MULTI-CONVERSION:

10 units can be stepped through at the touch of a button. psi, kPa, mmHg, BAR, mBAR, inHG, cmH₂O, Kg/cm², inH₂O, and % F.S. are included. Replaces analog pressure display.

WEIGHT:

UPS3000: Approximately 12 lb (5 kg)

UPS3110: Approximately 15 lb (6.8 kg)

UPS3210: Approximately 12 lb (5 kg)

OPTIONS

PEAK HOLD:

Last highest pressure reading stored in memory and recalled at the touch of a button. Calibrates burst discs and relief valves.

FREEZE MODE:

External switch contact, change of state, freezes display reading for three seconds. Calibrates pressure switches.

BATTERY:

Self-contained rechargeable battery provides a minimum of six hours of completely portable usage. May be operated or recharged by connecting the power cord to 115 VAC. Handle, power switch, and low battery indicator included with this option. Analog display not included with this option. Also not available in rack mount models.

OUTPUTS:

Analog: 4-20 mA, 0-10 VDC, 0-5 VDC

Digital: Parallel BCD, 20 mA loop, RS-232 simplex output

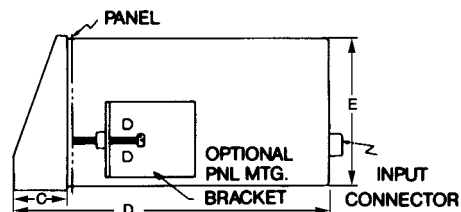
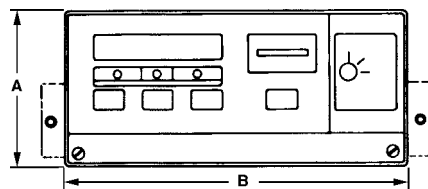
MIN/MAX:

Highest and lowest pressure readings stored in memory and recalled at the touch of a button

UPS3000 DIMENSIONS

A = 4.93" (125.22mm)	E = 4.69" (119.12mm)
B = 10.81" (274.57mm)	F = 4.75" (120.65mm)
C = 1.75" (44.45mm)	G = 10.62" (269.74mm)
D = 9.9" (251.00mm)	

Consult factory for UPS3110 & UPS3210 dimensions.



Panel cutout

