



# DLP (CONFIGURABLE OPTIONS)

## Differential Low Pressure (Uni/Bi-Directional)

The DLP Series is based on a piezoresistive, silicon sensing element which senses Differential Pressure and provides an analog output. The hinged cover on the DLP can be easily opened using the integrated locking tab on the side of the enclosure. This allows for easy access to the zero function and field selectable ranges and outputs. The DLP Series also includes an optional, five digit LCD for installation and monitoring support. Field selectable analog outputs include 0-5 and 0-10 VDC, or 4-20 mA which correlate to a uni or bi-directional pressure range from 0-0.1" up to 0-40" of water column, depending on your model selection. Each unit must be ordered with the specific pressure range needed to meet desired application requirements. Options include a Pitot Tube or Din Rail Clip.

**Applications:** Building and Duct Static Pressure, Filter Monitoring, Air Flow Measurement, and Process Control

**The DLP Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, [workaci.com](http://workaci.com).**

### PRODUCT SPECIFICATIONS

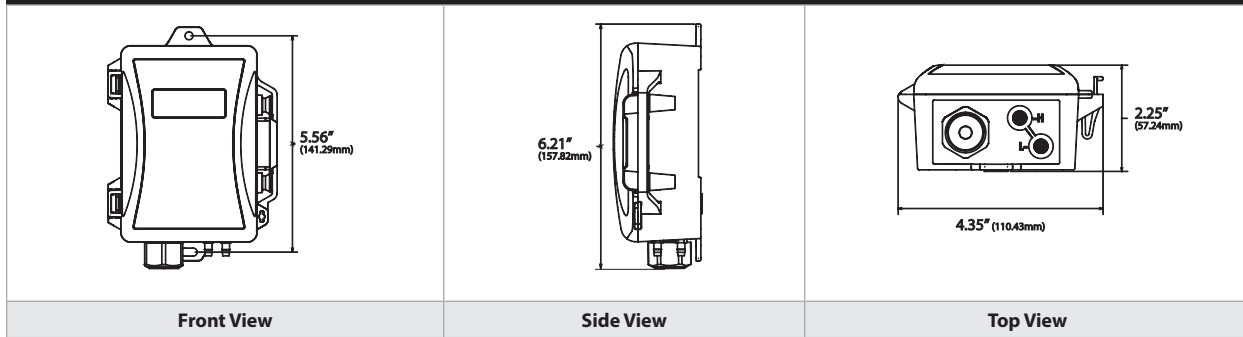
<b>Supply Voltage:</b>	<b>4-20 mA Output:</b> 16-36 VDC (250 Ohm Load max.) / 22-36 VDC (500 Ohm Load max.) / 24 VAC (+/-10%) 50/60 Hz
<b>Supply Current:</b>	<b>0-5 VDC / 0-10 VDC Output:</b> 15-36 VDC into > 5K Ohm Load / 24 VAC (+/- 10%), 50/60 Hz <b>4-20 mA Output:</b> 24 mA (0.83 VA)   <b>0-5 VDC / 0-10 VDC Outputs:</b> 6 mA maximum (0.18 VA)
<b>Output Signals:</b>	<b>4-20 mA:</b> 2-wire Loop Powered (output limited to 20.5 mA maximum) <b>4-20 mA:</b> 3-Wire, VAC Powered (output limited to 20.5 mA maximum) <b>0-5 VDC or 0-10 VDC:</b> 3-Wire, VAC or VDC Powered (output limited to 5.25 & 10.25 VDC)
<b>Response Time (0-100% FSO):</b>	4 seconds
<b>Output Update Rate:</b>	0.5 second intervals
<b>Pressure Range:</b>	Specify Single Range (See "Ordering" on Reverse Side)
<b>Accuracy<sup>1</sup>:</b>	<b>Specify:</b> +/-0.25% FSO (except for 0.1"(25Pa) range)   +/-0.5% FSO
<b>Zero Function:</b>	Pushbutton Zero Function
<b>Thermal Effects<sup>2</sup>:</b>	±0.067% FSO / °F (0.12% FSO / °C)
<b>Proof Pressure:</b>	≤ 1" wc (250 Pa): 270 inWC (67.2 kPa) for 1 inWC (249.8 Pa) range ≥ 1" wc (250 Pa) ≤ 10" wc (2500 Pa): 350 inWC (87.12 kPa) for 10 inWC (2490.8 Pa) range ≥ 10" (2500 Pa) ≤ 40" wc (10K Pa): 562 inWC (140 kPa) for 40 inWC (9963.6 Pa) range
<b>Burst Pressure:</b>	≤ 1" wc (250 Pa): 415 inWC (103.3 kPa) for 1 inWC (249.8 Pa) range ≥ 1" wc (250 Pa) ≤ 10" wc (2500 Pa): 550 inWC (136.9 kPa) for 10 inWC (2490.8 Pa) range ≥ 10" *2500 Pa) ≤ 40" wc (10K Pa): 1004.7 inWC (250 kPa) for 40 inWC (9963.6 Pa) range
<b>Operating Temperature Range:</b>	-4 to 185°F (-20 to 85°C)
<b>Compensated Temperature Range:</b>	32 to 122°F (0 to 50°C)
<b>Storage Temperature Range:</b>	-22 to 185°F (-30 to 85°C)
<b>Operating Humidity:</b>	10 to 95% RH, non-condensing
<b>Media Types:</b>	Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases
<b>Enclosure Material   Flammability Rating:</b>	Flame Retardant Polycarbonate; UL94-5VA
<b>Wiring Connections:</b>	Finger Pushbutton (Spring) Terminal Blocks; accepts 16-24 AWG wires
<b>Conduit Knockouts:</b>	Watertight Cordgrip Installed (1/2" NPT Conduit fittings accepted when Cordgrip removed)
<b>Pressure Fitting Material:</b>	Nickel Plated Brass
<b>Tubing Size Accepted:</b>	1/4" O.D. x 0.170" I.D. Poly Tubing
<b>NIST Certification:</b>	<b>3 Point NIST Test Points:</b> 10%, 50%, & 90% FSO <b>5 Point NIST Test Points:</b> 10%, 30%, 50%, 70%, & 90% FSO
<b>Approvals:</b>	CE, RoHS2, WEEE, Reach
<b>Product Weight (No Pitot Tube / Din Rail):</b>	<b>Non-LCD Display Version:</b> 0.53 lbs (0.240 kg)   <b>LCD Display Version:</b> 0.58 lbs (0.263 kg)
<b>Product Weight (With Pitot Tube &amp; Din Rail):</b>	<b>Non-LCD Display Version:</b> 0.80 lbs (0.363 kg)   <b>LCD Display Version:</b> 0.85 lbs (0.385 kg)

**Note<sup>1</sup>:** Accuracy includes Linearity, Hysteresis and Repeatability @ 71°F (21.5°C) | **Note<sup>2</sup>:** Shift is relative to 71°F (21.5°C)





**DIMENSIONAL DRAWING**



CUSTOM ORDERING		Model # Example: A/DLP 001 W B D B 1 A 3P S										MODEL #
		A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	
<b>A. Sensor Series</b> <i>No Selection Required</i>	A/DLP	→										A/DLP
<b>B. Differential Pressure Range</b> <i>Select One (1)</i>	D10 (0.10)** D25 (0.25) D50 (0.50) 001 (1) 002 (2)	2D5 (2.5) 003 (3) 004 (4) 005 (5) 010 (10)	015 (15) 020 (20) 025 (25)** 030 (30) 040 (40)	050 (50)* 100 (100)* 125 (125)* 250 (250)* 300 (300)*	500 (500)* 750 (750)* 1K0 (1,000)* 1K2 (1,250)* 1K6 (1,600)*	2K5 (2,500)* 3K2 (3,200)* 5K0 (5,000)* 7K5 (7,500)* 10K (10,000)*						
<b>C. Units</b> <i>Select One (1)</i>	W = Water Column   P = Pascal											
<b>D. Bi/Uni Directional</b> <i>Select One (1)</i>	U = Uni-Directional (i.e. 0 to 1" wc)   B = Bi-Directional (i.e. -1 to +1" wc)											
<b>E. Display</b> <i>Select One (1)</i>	N = No LCD Display   D = With LCD Display											
<b>F. Accuracy</b> <i>Select One (1)</i>	A = +/- 0.5%   B = +/- 0.25%											
<b>G. Pitot Tube/Din Rail</b> <i>Select One (1)</i>	0 = No Pitot Tube/Din Rail   1 = Pitot Tube   2 = Din Rail   3 = Pitot Tube & Din Rail											
<b>H. Analog Output</b> <i>Select One (1)</i>	A = 4 to 20 mA   B = 0-5 VDC   C = 0-10 VDC											
<b>I. NIST</b> <i>Select One (1)</i>	OP = None   3P = 3 Point NIST   5P = 5 Point NIST											
<b>J. Enclosure</b> <i>No Selection Required</i>	S = Standard Enclosure	→										S

Note\*: Pascal Ranges Only | Note\*\*: "025" range is available in either wc or Pa ranges | Note\*\*\*: 0.10"WC and 025 Pa accuracy is +/- 0.50% only (Use "A" for Accuracy Selection)

**STANDARD ORDERING**

Model # Example: A/DRC-DLP -OR- 140999

Model #	Item #	Description
A/PT-DLP	140998	Pitot Tube, DLP Duct Static   Size: 7" (6.75" Insertion)   Material: Aluminum
A/DRC-DLP	140999	Din Rail Clip, DLP   Size: 35 mm

Note\*: Other compatible products include ACI's Pick up Port (A/PUP) Series, Medical Grade Tubing Kit (A/10'), Transformer Series (A/LE) and DC Power Supply(A/PS24-24V-S)





ACCESSORIES ORDERING | PITOT TUBES

Model # Example: A/PT 5.2 -OR- 130141

Model #	Item #	Description	Insertion Length	Number of Sensing Points
PT 3"	130140	3.0" Pitot Tube with Foam Gasket	3.0" (7.6 cm)	1 Set
PT 5.2"	130141	5.2" Pitot Tube with Foam Gasket	5.2" (13.2 cm)	2 Sets
PT 7.5"	130142	7.5" Pitot Tube with Foam Gasket	7.5" (19.1 cm)	3 Sets
PT 9.7"	130143	9.7" Pitot Tube with Foam Gasket	9.7" (24.6 cm)	4 Sets
SPT - 3.5"	102957	3.5" Aluminum Duct Static (Flat Tip) Pitot Tube	3.5" (88.9 mm)	1 Point
SPT - 8.0"	108976	8.0" Aluminum Duct Static (Flat Tip) Pitot Tube	8.0" (203.2 mm)	1 Point
VPT	103010	4.0" Aluminum Velocity (Pointed Tip) Pitot Tube	4" (101.6 mm)	1 Point
VPT - 8"	125008	8.0" Aluminum Velocity (Pointed Tip) Pitot Tube	8" (203.2 mm)	1 Point

ACCESSORIES ORDERING | PICK UP PORTS

Model # Example: A/SP-PUP -OR- 125585

Model #	Item #	Description	Color
A/SP-PUP	125585	Pickup Port, Wall Mounted Stainless Plate	Brushed Stainless Steel
A/R-PUP	125584	Pickup Port, Wall Mounted Plastic Enclosure	Beige
A/R2-PUP	132711	Pickup Port, Wall Mounted Plastic Enclosure	White
A/O-PUP-H	132892	Pickup Port, Horizontal Mount, Outdoor Weatherproof Euro Enclosure	Light Gray
A/O-PUP-V	132891	Pickup Port, Vertical Mount, Outdoor Weatherproof Euro Enclosure	Light Gray

