The Series DH Digihelic® Differential Pressure Controller is a 3-in-1 instrument possessing a digital display gage, control relay switches, and a transmitter with current output. Combining these three features allows the reduction of several instruments with one product, saving inventory, installation time and money. The Digihelic® Controller is the ideal instrument for pressure, velocity and flow applications, achieving a 0.5% full scale accuracy on ranges from 5 to 100 in w.c.

The Digihelic® Controller allows the selection of pressure, velocity or volumetric flow operation in several commonly used engineering units. Two SPDT control relays with adjustable deadbands are provided along with a scalable 4-20 mA process output. The Series DH provides extreme flexibility in power usage by allowing 120/220 VAC and also 24 VDC power which is often used in control panels.

Programming is easy using the menu key to access five simplified menus which provide access to: security level; selection of pressure, velocity or flow operation; selection of engineering units; K-factor for use with flow sensors; rectangular or circular duct for access to: security level; selection of pressure, velocity or flow operation; selection of engineering units and models DH-009 & DH-010.

SPECIFICATIONS
Service: Air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Housing Material: ABS plastic, UL approved 94-V-0.
Accuracy: ±0.5% at 77°F (25°C) including hysteresis and repeatability.
Stability: < ±1% per year.
Pressure Limits: Ranges ≤ 2.5 in w.c. = 2 psi; 5": 5 psi; 10": 5 psi; 25": 5 psi; 50": 5 psi, 100": 9 psi.
Temperature Limits: 32 to 140°F (0 to 60°C).
Compensated Temperature Limits: 32 to 140°F (0 to 60°C).
Thermal Effects: 0.020%/°F (0.036°C) from 77°F (25°C).
Power Requirements: High voltage power = 100 to 240 VAC, 50 to 400 Hz or 132 to 240 VDC. Low voltage power = 24 VDC ±20%.
Power Consumption:
Low voltage power = 24 VDC - 130 mA max;
High voltage power = 100 to 240 VAC, 132 to 240 VDC - 7VA max.
Output Signal: 4-20 mA DC into 900 Ω max.
Zero & Span Adjustments: Accessible via menus.
Response Time: 250 ms.
Display: 4 digit LCD 0.4″ height. LED indicators for set point and alarm status.
Electrical Connections: Screw terminals.
Process Connections: Compression fitting for use with 1/8˝ ID X 1/4˝ OD tubing (3.175 mm ID x 6.35 mm OD). Optional barbed fitting for 3/16˝ ID tubing.

ACCESSORIES
The Mini-Node™ converters are an easy solution for utilizing the Digihelic® Controller’s RS-485 serial communication and connecting to virtually any PC.
MN-1, Mini-Node™ USB/RS-485 converter .................................................. $77.50
A-266, Digihelic® surface mounting bracket .............................................. 29.00
A-203, 1/8˝ ID X 1/4˝ OD PVC tubing ..................................................... 1.30/ft
Digihelic Links™, Communication Software ............................................. 51.50

Bi-Directional* Ranges also available:
DH-012, Range: 0.25 - 0 - 0.25 in w.c. ...................................................... $505.00
DH-014, Range: 1.0 - 0 - 1.0 in w.c. ......................................................... 505.00
DH-015, Range: 2.5 - 0 - 2.5 in w.c. ......................................................... 384.00
DH-016, Range: 5 - 0 - 5 in w.c. .............................................................. 384.00
DH-017, Range: 10 - 0 - 10 in w.c. ........................................................... 384.00

*Velocity and volumetric flow not available on bi-directional range units and models DH-009 & DH-010.

See page 567 for process tubing options.