

832 Dimensionair® Air Gaging (Zero master system)

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**Features**

- Digital and analog displays in a single unit. Large, high contrast digital readout shows exact deviation from zero; analog display shows measurement conditions at a glance
- Fixed resolution and balanced air system makes the Digital Dimensionair a stable and reliable system for manufacturing environments.
- Only a single master required to set zero; system is precalibrated for correct magnification
- Ranges and resolutions for virtually any air gage application, including 2-, 3-, 4- and 6-jet tooling plus AirProbes and JetProbes.
- Dynamics measurement capability
- RS-232 Output – for communicating with a data collector, computer or printer, permitting statistical process control
- Master Deviation – enhances measurement by making Auto Zero even more accurate.

Technical Data

Model	Measuring Range	Digital Resolution	Analog Resolution	Tooling I.D. Number
Low Magnification Single or Dual Input	$\pm 0.080 \text{ mm} / \pm .003''$	0.0002 mm / $10\mu''$	0.004 mm / $150\mu''$	60
	$\pm 0.040 \text{ mm} / \pm .0015''$		0.002 mm / $75\mu''$	50
	$\pm 0.020 \text{ mm} / \pm .00075''$		0.001 mm / $38\mu''$	20
High Magnification Single or Dual Input	$\pm 0.008 \text{ mm} / \pm .0003''$	0.0001 mm / $5\mu''$	0.0004 mm / $15\mu''$	10
	$\pm 0.004 \text{ mm} / \pm .00015''$		0.0002 mm / $8\mu''$	5
Operating Temperature	5~35° C / 41~95° F			
Storage Temperature	0~60° C / 32~140° F			
Repeatability	± 1 digit or $\pm 1\%$ of range, whichever is greater			
Calibration Accuracy	± 1 digit*			
Linear Error	± 1 digit			
Response Time (Electronics)	43 msec.			
Response Time (Air)	approx. 1 sec. (dependent on hose length of air tooling)			
Thermal Stability	0.1% of full scale/°F			
Digital I/O	five TTL opto-isolated outputs			
Data Output	RS-232, transmits Channels A, B, (or both – dual input models only)			
Analog Output	± 5 VDC full scale for displayed value signal $\pm A$, $\pm B$			
Measuring Modes	Actual, Minimum, Maximum, T.I.R., Nominal			
Tolerance Indicators	five LED			
Weight (approx.)	5 kg / 11 lbs.			
Dimensions H x W x D	254 x 197 x 216 mm / 10" x 7.752 x 10.25"			
Display Modes	A, (or B or both – dual input models only)			
Auto Power Off	after 30 minutes of non-use (selectable)			
Power Requirements	100 Vac to 240 Vac, 50-60Hz with power module (Furnished)			

Note: All models listed may be ordered for: 1-Jet, 2-Jet, 3-Jet, 4-Jet, or 6-Jet applications. At time of ordering, PLEASE designate the number of jets to be used on the system.

** For applications where the local elevation is greater than 305M/1000 feet, special calibration is required.*

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Number of Jets	Voltage/Adaptor	Low Magnification Single Input Order no.	High Magnification Single Input Order no.	Low Magnification Dual Input Order no.	High Magnification Dual Input Order no.
1, 2, 3	110/U.S.	2004100	2004103	2004106	2004109
4	110/U.S.	2004101	2004104	2004107	2004110
6	110/U.S.	2004102	2004105	2004108	2004111
1, 2, 3	240/International	2004112	2004115	2004118	2004121
4	240/International	2004113	2004116	2004119	2004122
6	240/International	2004114	2004117	2004120	2004123

Accessories

Order no.	Description
7024634	RS-232 Cable, Amplifier to MSP-2 Printer or computer, 2m / 6ft cable
ECV-1276	Oil/Splash Cover (opaque)—provides protection for the 832 Digital Dimensionair® when used in harsh environments
ECV-1285	Oil/Splash Cover (clear)—provides protection for the 832 Digital Dimensionair when used in harsh environments
ECB-1857	Footswitch for HOLD/RESUME, 3m / 10ft cable
ECB-1858	Footswitch for DYNAMIC RESET, 3 m / 10ft cable
ECB-1859	Footswitch for SEND DATA, 3m / 10ft cable
ECB-1855	Pushbutton for DYNAMIC RESET, 1.5m / 5ft cable
ECB-1860	Pushbutton for SEND DATA, 1.5m / 5ft cable
ECB-1861	Pushbutton for HOLD/RESUME, 1.5m / 5ft cable
ECB-1868	Pushbutton for HOLD/RESUME and SEND DATA, 3m / 10ft cable
EKT-1236-W3	Relay Box – five relays each with Normally Open/Normally Closed contacts: Contact Rating – 30 Vdc/120 Vac, 3 amps Power Supply – 120 Vac Dimensions – 39 mm x 129 mm x 134.6 mm d/ 1.53" x 5.08" x 5.32" with ECB-1886-W2*, 6.1 mm / 24" interconnect cable amplifier/relay box
EKT-1236-W4	Same as W3, except with 220 Vac Power Supply
EKT-1236-W5	Same as W3, except with 240 Vac Power Supply
2010000	Power Supply, U.S. Adaptors (120V)
2010001	Power Supply, International Adaptor (120/240V)
Mating Connectors	
ECN-1695-W2	Digital I/O (15 pin male)
ECN-1693	Reset Data (3/32 microphone plug)
ECN-1695-W1	RS-232 Digital Output (9 pin female)

* Order ECB-1886-W1 for 305 mm / 12" interconnect cable, or, ECB-1886-W3 for 914 mm / 36" cable.