

# MICRO IIi Air Gage Readout

## Advanced features . . .

- Ruggedized Microcontroller
- Operates all types of air gage members and LVDT sensors
- Out-of-tolerance conditions flagged red
- CE Compliant
- Backlit LCD display
- Auto calibration using one or two setting masters
- Wrap-a-round bargraph
- RS-232 & USB Serial Data Ports



## Applications . . .

- Precise measurement of Internal & External Diameters
- Match fitting mating components
- I.D. straightness measurement
- Inspection of Internal & External Tapers
- Flatness inspection
- Custom multi-feature fixtures

WESTERN GAGE CORPORATION - Camarillo, CA 93012  
(800) 423-5062 - FAX (805) 445-7530 - sales@westerngage.com

## Micro IIi Features . . .

### Single or Dual master operation

Readouts for single master operation are calibrated using master standards prior to shipment; the only adjustment required before gaging parts is that the user "zeroes" the Readout with a nominal setting master. Dual mastered Readouts are calibrated by the operator using minimum and maximum setting masters. Western's series 60, 70 and 80 air gage members are designed specifically for single setting master operation, while series 10 air gage members are for use with dual mastered Readouts.

### Auto-Zero (single master operation)

The **MICRO IIi** Auto-Zero feature makes set-up a snap. The user enters the nominal master size once during set-up. Subsequently, the Readout is zeroed by placing the setting master on the air gage member, then pressing the center key on the front panel.

### Auto-Span (dual master operation)

The **MICRO IIi** Auto-Span feature facilitates calibration using two setting masters. After entering master sizes during set-up, the user calibrates the Readout by sequentially placing the masters on the air gage member, then pressing the center key.

### Digital display

A seven digit backlit LCD type display shows the actual part size. Master size and Hi / Lo limits are entered with front panel keys. Out-of-tolerance conditions are flagged by changing the display color from green to red (see example on opposite page). Digital resolutions down to 2 μ-inches or .05 micron are available for close tolerance applications.

### Bargraph display -- range selection

In addition to the digital display, an 81-segment bargraph is incorporated into the **MICRO IIi**. Using the values inputted for size limits, the span between tolerance markers is automatically set. An expanded range mode, Gage 2X, is also available for viewing oversize workpieces.

### Serial digital output

Standard to all Readouts are the RS-232 and USB serial data ports, providing convenient interface with Western's printer and most computers and S.P.C. software.

### TIR function

Press the "TIR" button and the "Total Indicator Recording" mode is started. The **MICRO IIi** begins storing the minimum and maximum gage readings. Press the button again and min-max difference (TIR) is displayed. Feature is standard on single channel units only.

## MICRO IIi SPECIFICATIONS

### Model AEQ 42

ORDER CODE:

**AEQ42(x)-xx-xx**

MODEL No.      POWER CORD      No. OF DISPLAYS      SERIES      No. OF INPUTS

3.0" (76mm)  
PER DISPLAY

11.0"  
(279mm)

6.5"  
(165mm)

8.5"  
(216mm)

DIGITAL DISPLAY: 7 Digit LCD type  
BAR GRAPH: 81 segment LCD type

OUTPUTS:  
Serial digital: RS 232 & USB port  
High/Low Limit: +5v, .5ma (Ch. 1 Only)

MULTI-CHANNEL DISPLAY OPTIONS:  
Custom programming of display outputs - A-B, A+B, A-C, etc.. Consult factory.

POWER: 100-240 VAC 50-60 HZ  
100 mA (MAX)

AIR: 40 to 120 psi,  
2 CFM per channel (MAX)

WEIGHT: AEQ 42-11-( )... 12#  
Additional Display... 2# ea.

## MICRO IIi Multi-Channel Applications

Configured with dual inputs, the *MICRO IIi* is the ideal instrument for match fitting components such as hydraulic valve spools to sleeves, fuel injector plungers to cylinders, and air bearing sleeves to shafts. Connected to a set of Western's air probes



**MICRO IIi** Model AEQ 42-32N-60

and air ring gages, the *MICRO IIi* displays I.D. size, O.D. size and the clearance between the mating parts at digital resolutions down to 2 micro-inches or .05 microns.



**MICRO IIi**  
Model AEQ 42-22-10

Configured with three input channels and connected to a Western Gage custom air taper gage, the *MICRO IIi* is unsurpassed for fast and reliable inspection of internal and external tapers. The display shows front, middle and back deviations from true taper in products such as machine tools, medical implants, flywheel and pulley parts.



**MICRO IIi**  
Model AEQ 42-33M-60  
with #40 machine tool

Rapid inspection of parts is facilitated by displaying "out-of-tolerance" conditions in red. Using a highly visible bargraph display, the *MICRO IIi* shows the position of each feature relative to its product specification.



**MICRO IIi**



## Other quality products from Western Gage:

- Air to Electric Converter
- Air probes & air rings for all major makes of air gage readouts
- Setting masters and part-like master gages
- Air gage accessories
- Custom gaging fixtures
- LVDT sensor inputs
- Temperature compensation



Western Gage Corporation has been providing quality precision solutions for industry needs since 1968. View online or Call, FAX, or e-mail us for your copy of Western Gage's Dimensional Air Gage Buyer's Guide.



**WESTERN GAGE CORPORATION**

**3316-A Maya Linda**

**Camarillo, CA 93012-8059**

**(800) 423-5062 (Toll Free) . (805) 445-1410 (Local) . (805) 445-7530 (FAX)**

**Visit us on line at [www.westerngage.com](http://www.westerngage.com)**

**or e-mail us at [sales@westerngage.com](mailto:sales@westerngage.com)**

