### Accuscan<sup>™</sup> 5000 Series

## In-Process Diameter Measurement

#### Accurate, Dependable, Versatile

AccuScan diameter gauges are legendary for their consistently accurate diameter measurements, minimal maintenance and extraordinary reliability. And now, thanks to an expanded range of options and accessories, you can design an AccuScan 5000™ system that precisely matches your requirements.

Each AccuScan gauge has advanced electronics to provide exceptional accuracy and high-speed communication via RS-232, DeviceNet, Ethernet IP, CANopen, and Profibus protocols. This unrivalled flexibility ensures that there is always an optimal solution for getting data from an AccuScan 5000 gauge to the system of your choice. Connecting to a PLC, PC, or Beta LaserMike controller has never been easier. Or simply integrate the optional display and use the AS5000 as a fully functional, stand-alone system. The AccuScan 5000 also utilizes industry-standard D-style and Euro-fast connectors for easy cabling and in-field wiring. And because the transmission is digital, you're assured of error-free data. The architecture also provides sophisticated data processing capabilities, such as in-head tolerance checking, flaw detection, FFT analysis and PI Control.

The AccuScan 5000 sensor head is, of course, the foundation on which you can build your application-specific system. And no matter how you configure it, you'll always have these outstanding performance characteristics:

- High accuracy, low drift measurements
- Rugged case construction sealed to NEMA4 and IP65 standards providing continuous operation
- Accurate measurement regardless of where the product is positioned within the measuring gate



#### AccuScan 5000 Series Advantage

- High scan rate of 2400 scans/second for enhanced process monitoring
- Optional Ultra-Bright integrated display and operator interface for ease of use
- Robust, field proven design for reliable operation under harsh conditions
- High-performance optics with unique calibration technique providing the highest achievable accuracy
- Integated air purge for extended operation
- Flexible communication for easy integration everywhere
- Use stand-alone or part of a full line solution

#### **Specifications**

Model	OD Range	Gate Size	Resolution	Accuracy	Scan Rate	Dimensions (LxHxW)
AccuScan 5010	0.1 - 10 mm (0.004 - 0.40 in.)	16 mm (0.63 in.)	0.00001 mm (0.000004 in.)	±0.0005 mm <sup>1</sup> (±0.000020 in.)	2400 scans/sec.	255 x 174 x 40 mm (10.0 x 6.85 x 1.57 in.)
AccuScan 5025	0.2 - 25 mm (0.008 - 1.00 in.)	52 mm (2.05 in.)	0.00001 mm (0.000004 in.)	±0.001 mm <sup>1</sup> (±0.000040 in.)	2400 scans/sec.	380 x 360 x 80 mm (15 x 14.2 x 3.1 in.)
AccuScan 5040	0.2 - 40 mm (0.008 - 1.50 in.)	52 mm (2.05 in.)	0.00001 mm (0.000004 in.)	±0.001 mm <sup>1</sup> (±0.000040 in.)	2400 scans/sec.	380 x 360 x 80 mm (15 x 14.2 x 3.1 in.)
AccuScan 5080	1.27 – 80 mm (0.050 – 3.15 in.)	108 mm (4.25 in.)	0.00001 mm (0.000004 in.)	±0.002 mm <sup>2</sup> (±0.000080 in.)	2400 scans/sec.	660 x 634 x 107 mm (26 x 25 x 4.2 in.)
AccuScan 3175*	10.0 – 175 mm (0.39 – 6.89 in.)	200 mm (7.87 in.)	0.001mm (0.00004 in.)	±0.02 mm <sup>3</sup> (±0.00080 in.)	500 scans/sec.	749 x 1365 x 187 mm (29.5 x 53.7 x 7.4 in.)

<sup>1</sup>+/- 0.02% of product size; <sup>2</sup> +/- 0.01% of product size; <sup>3</sup> +/- 0.1% at the center of the gate \* AccuScan 3175 uses camera CCD technology. All other gauges use laser scanning technology.





#### Connectivity

AccuScan 5000 is available in Profibus, CANopen or DeviceNet. Connecting to a PLC, PC or Beta LaserMike system has never been easier.

AccuScan	5000-R	Communication Port: RS232
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Used with: DataPro 1000/3000/5000,

Betascan or PC/PLC

AccuScan 5000-P Communication Port: Profibus DP slave.

Used with: Profibus DP network

AccuScan 5000-A Dual Analog/Relay Output Configuration

AccuScan 5000-C Communication Port: CAN Open

AccuScan 5000-K Proportional Integral Control Configuration

> \*RS232 and Ethernet are standard on all versions. Ethernet IP option available.

#### Accessories

Air Cleaner				
SA 0042-0044-1/A	In-line filter/regulator to ensure clean-air for the gauge air-wipe.			
Calibration Sets				
GA 1530-7691-1/A	Calibration pins and software. For AS5010			
GA 1530-7839-1/A	Calibration pins and software. For AS5025, AS5040			
GA 1530-9419-1/A	Calibration pins and software. For AS5080			
GA 1530-5710-1/A	Calibration pins and software. For AS3175			
Guide Rollers				
SA 1530-6070-2/A	5 mm product guide (2 required). For AS5010			
ASY 1530-7396-1/A	10 mm product guide. For AS5010			
SA 1530-6634-1/A	25 mm product guide. For AS5025, AS5040			
SA 1530-6633-1/A	40 mm product guide. For AS5040			
SA 1530-9436-1/A	80 mm product guide. For AS5080			
Height Stands				
GA 0042-0062-2/A	Height stand for AS5010			
GA 0042-0001-1/A	Height stand for AS5025, AS5040			
83961	Height stand for AS5080			
N/A	Motorised height stand included with AS3175			
Light Stack				
84980	2 Light stack			
Power Module				
GA 1530-6965	Converts 105-240 VAC to 24 VDC			

#### Software Options

The AccuScan 5000 options provide enhanced measurement performance and extra connectivity.

OEX 1530-7420 Glass logic for measuring transparent/

translucent products.

OEX 1530-6256 Single scan flaw detection for Lump and

Neckdown detection.

OEX 1530-7370 In head FFT analysis of the diameter measurement.

Output available via Profibus, DeviceNet or

CANopen.

OEX 1530-7371 Fast analog output (1200 samples/sec. per

selected measurement) for further analysis or

connection to a Digital Panel Meter.

OEX 1530-7399 STAC logic for measuring stranded, twisted,

armoured or corrugated products.

OEX 1530-7771 DeviceNet (available on -A and -R versions)



**Ultra-Bright Display** 



**Height Stand** 



**Guide Rollers** 



Calibration Set



**Light Stack** 

**ISO 9001** Certified



MAXIMUM OUTPUT 1mW WAVELENGTH 675nm CLASS 2 LASER PRODUCT EN 60825-1:1994

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