❖ Capacitec ®

GAPMAN GEN3

Gapman® Portable Electronic Feeler Gage

GapmanGen3 is the latest generation high precision, non-contact, portable electronic gap measurement gage. Features include:

• A dual capacitive sensor for position-compensated measurement

• Easy insertion into very thin gaps down to 0.0075" (0.190 mm) in a wide range of parallel and roller gap applications

• Micro-controller based and application software driven

• Gapman records and stores data points for easy transfer to support Six Sigma and other quality programs

GapmanGen3 shown with spring contact wand

Applications

Aircraft assemblies: wings, fuselage

Composite structures: CFRP

PowerGen: rotor/stator, steam, gas, hydro

Coaters/extruders: slot die, extrusion dies

Roller gaps: photocopiers, high volume printers

Industrial machinery: set up tools, alignment

GapmanGen3 with flexible GPD-4.5-A-250

Benefits

- Dramatic improvement over feeler gages
- Eliminates operator to operator subjectivity
- Consistently meets or exceeds stringent Gage R&R qualification

- Speeds aircraft shimming operations by up to four times
- Measures gaps between all metal and CFRP surfaces
- Spring sensor wand configurations for non-conductive targets

- Compact, fully portable, light weight and rugged
- 22 hour battery life at full function output or USB power option
- Records 10,000+ data points for easy transfer via USB or wireless to data reader software
- Resolution: up to 0.01% full scale, repeatability: ±0.05% full scale, accuracy: ±0.5% full scale
- Overall design focus on simplicity

Applications

Aircraft assemblies - hidden

CFRP to metal gaps

PowerGen - rotor to stator
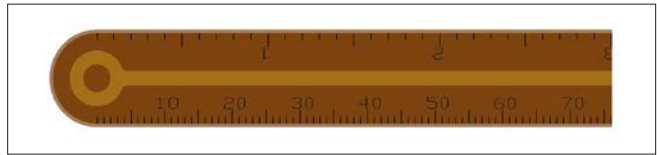

Slot die coater gaps

Roller gaps

Printers, high volume photocopiers
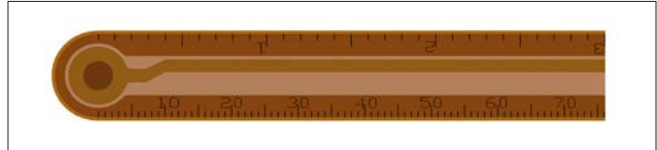
Technical Specifications

Gapman Core Unit
Size: 2.2"x 8.7"x 1.1" (56mm x 220 mm x 28 mm)

Thin sensor wand GPD-5F-A-200
Size: 0.55"x 7.9"x 0.017" (14 mm x 200 mm x 0.43 mm)
Range: .017" to 0.118" (0.43mm to 3.00mm)

Thin sensor wand GPD-4.5(.0075)-A-250
Size: 0.55"x 9.8"x 0.0075" (14 mm x 250 mm x 0.190 mm)
Range: .0078" to 0.100" (0.20mm to 2.54mm)

Spring contact wand GPD-5(.022)-A-150
Size: 0.55"x 7.9"x 0.017" (14 mm x 200 mm x 0.43 mm)
Range: .025" to 0.140" (0.64mm to 3.56mm)

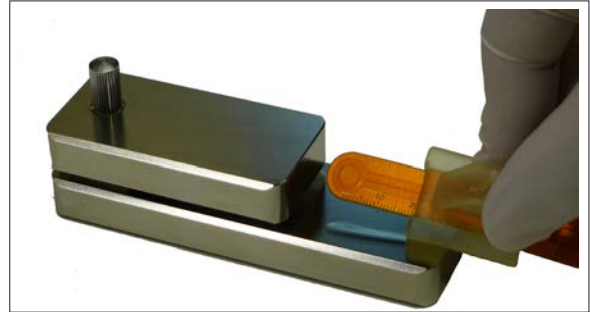| Target materials		Measures gaps between all earth grounded metal and composite (CFRP) surfaces
Remote vs integral sensor wands		Remote sensor wand kit available
Accuracy		± 0.5% FS
Repeatability		± 0.05% FS
Resolution	micron	0.00001" (0.254 microns)
	mm	.0001mm
	inches	.0001"
Calibration		Factory preset, traceable to NIST
Thin gap sensor wands		Select from over 20 standard models, custom wands available
Spring contact wand		Select from several standard models. For applications where one or both of the target surfaces are uneven or non conductive
Control buttons		External buttons for units, set to standard, data, and delete with optional lockout
Display		Bright blue alphanumeric active matrix OLED display, 128 x 64 pixel, 1.54" (39.12mm)
Data output	USB	USB Type A locking to standard USB cable
	wireless	Blue Tooth v2.0 Class 1 10m standard, 30m optional with reciever
Internal power		3 AA batteries for battery life of 22 hours max, 1/3 less with wireless
External power		USB Type A AC universal power adapter, or laptop PC

4200GM-Gen3 Standard System

Standard Gapman measurement system

Optional calibration block and wand positioner

A standard GapmanGEN3 gap measurement system includes the following

- Gapman core unit for integral wands, and built in 10,000 point data logger
- GPD-5F-A-200 non-contact flexible sensor wand, 0.017" to 0.100" (0.43 mm - 2.54 mm) (Example wand)
- Grounding cable, with 90° banana plug to straight banana plug with gator clip (12 feet)
- USB power/data comm accessory kit, includes USB Type A AC universal power adapter and USB Type A locking to standard USB cable (6 feet)
- Flat metal to flat metal NIST traceable calibration w/data sheet
- Data reader software & cal data on flash drive
- Supervisor/calibration access level option
- 3-Point thin wand quick check block
- 2 sets of 3 long life "AA" batteries
- Rugged IP67grade carrying case

Mounting feature

USB I/O, Ground

Capacitec ®

US HEADQUARTERS
Capacitec, Inc.
87 Fitchburg Road
P.O. Box 819
Ayer, Massachusetts 01432
USA
TEL: 978-772-6033
FAX: 978-772-6036
email: sales@capacitec.com
www.capacitec.com

EUROPEAN HEADQUARTERS
Capacitec Europe
16, rue Séjourné
94044 CRETEIL cedex
FRANCE
TEL: 33 1 43 39 48 68
FAX: 33 1 49 80 07 49
email: eurosales@capacitec.com
http://fr.capacitec.com