# GE Sensing & Inspection



## **DMS Go** A-Scan Thickness Gauge

November 2010



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## High performance A-Scan thickness gauge in field-proven USM Go Package With Powerful data recorder And Field upgradeability to USM Go functionality



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## Same Great Features as the Field Proven GE USM Go Flaw Detector...

- Small and lightweight
  - 870 g (1.92 lbs)
- Simple user interface
- One hand ambidextrous operation
- Large color TFT display
  - 5 inch screen diagonal
  - 800 x 400 pixels
- Sealed to IP 67 dust & water proof





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# DMS Go Offers Our Thickness Gauging Customers...

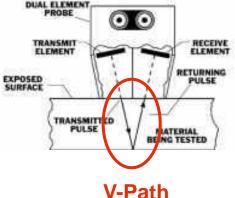
- Stable, repeatable thickness measurements
- High temperature measurement performance
- Comprehensive data recorder
- Easy field upgradeability
  - Add USM Go functionality to DMS Go
  - Add DMS Go functionality to USM Go



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## **Thickness Measurement Stability**

- Automated Gain Control (AGC)
  - Big time-saving for inspectors: gain is adjusted automatically to compensate for surface and back wall condition
- Zero crossing measurement improves reading stability
  - It's easier –and faster- to check the measurement because it is always done the same way
  - Proprietary algorithm eliminates measurement errors due to cycle skipping
- V-path correction ensures measurement accuracy with dual element transducers





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## High Temperature Thickness Measurement Performance

Meaured

Stable high temperature thickness readings with DA-590 probe

Temperature correction of thickness with industry algorithms

Ability to support other probes including HT-400 using custom probe set-ups

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#### 1000°F

Testing Block	Measurment (inch)		
.25"	0.263		
.50"	0.499		
.75"	0.754		
1.00"	1.011		

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<b>Testing Block</b>	Temperature (°F)	Thickness
.040"	435	0.039
.103"	414	0.102
.207"	484	0.203
.516"	446	0.508
1.031"	404	1.031

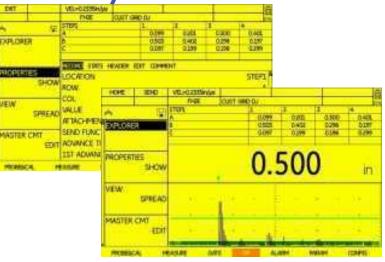
Measured

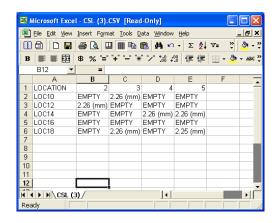


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# Powerful Data Recorder with SD Card and USB Connectivity

- ✓ Same data recorder capabilities as fieldproven DMS2 plus a few <u>new</u> features...
  - DMS GO 'Explorer' for file navigation
  - Export in PDF, CSV, and DAT formats
- ✓ Thickness readings and set-up parameters stored on SD Card
- Same data transfer capabilities as USM Go via SD card or USB cable
- New UltraMate supports DMS Go, DMS 2, and DM5
- ✓ SDK available for 3<sup>rd</sup> party software integration including PCMS, Meridian, Siemens (old UltraPipe), & Metegrity Visions (former RTD)







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# Supports the GE DA-5XX Probe Family and Popular Legacy Probes

- DA-5XX probes
- DA-590 high temp probe
- OSS-10 for oxide scale
- TC 560 Top Coat Probe
- Some legacy DA-3XX probes
- Popular single element probes
- Other probes with custom set-ups







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## Easy Field Upgradeability





## **Both ways**



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# Small, Lightweight, Easy-to-Carry...

- DMS Go is the lightest weight A-Scan thickness gauge at 870 grams
- DMS Go will easily fit inside a briefcase or coveralls pocket





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## Easy-to-Read Screens and Multiple Display Modes

#### Large Digits Mode

HOPE	5840	VEL+5974m/s	P-Dirty9.478ys	GAN-SEE -B	MGAREELE
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		DASID	TDPATT	C-114640.00mm	(OC-R.EV311
ń.	50				
PROBE					
	DA301			_	
			17	70	N
TG MODE			1/	/1	
	DUAL		1.6	. / U	mm
THK CAL			10,000		20002
ITR CAL	2-PT	2 8	2016	8 52 1	2 12 123
	250			-	
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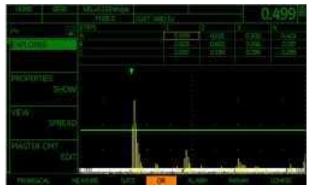
#### Menu Prompted Calibration Mode



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#### Large A-Scan Mode w/Grid File



#### **B-Scan Mode**



# Easy-to-Use...Joy Stick with Simple Menu Operation

HOME	SEND	VEL=5974m/s	P-DLY=9.439µs	GAIN=58.8 dB	M-GAIN=81.8 dB	1
		DA301	TEMP=21°C	C-THK=0.00mm	LOC=ELEV311	1
~						
PROBE	DA301		10	70		
TG MODE	E DUAL		12	.70	mm	١
THK CAL	2-PT			· · ·	• •	
CALIBRA	TION		·   ·	1	i 1	-
CHLIDKA	START	· ·		<u> </u>	e •	1
PROBECC		ASURE GA	TE DR	ALARM PAR	AM CONFIG	70

<u>Joy Stick Operation</u> Up/Down scrolls to options Left/Right selects value



### Less Operator Fatigue All controls fall naturally under the thumb



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# Easy-to-Read...Large Display Area, High Pixel Count, and Landscape Orientation

- Large display area & high pixel count for better signal resolution and easier readability
- DMS Go 'landscape' display ratio gives better echo separation





Display Area: 5 inch diagonal Pixel Count: 800 x 400 Display Ratio: Landscape



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# **DMS Go Packages**

DMS Go Options	DMS Go Base	DMS Go TC	DMS Go DR	DMS Go Advanced
The Instrument + Zero Block	•	•	٠	٠
1 Battery	•	•	•	•
Battery Charger	٠	٠	•	٠
Mobility Kit: Handstrap + SD Card + Transportation Case	•	•	٠	•
TopCoat & Auto-V	option	٠	option	٠
Advanced Data Recorder	option	option	•	•
UltraMATE Lite	option	option	•	•
Chest Harness	option	option	•	•
USM Go Flaw Detector Features	option	option	option	option



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## DMS Go Offers Asset Owners and Inspection Service Providers...

- Stable, repeatable thickness measurements
- High temperature measurement
  performance
- Thickness measurement compensation for temperature
- Comprehensive data recorder with Explorer file navigation and SD card file operations
- Easy field upgradeability to portable flaw



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## DMS Go Offers DMS and DMS2 Owners...

- DMS 2 capabilities in new field-proven IP 67
  package
- High resolution color display
- Improved thickness measurement capabilities including stable high temperature performance



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### DMS Go Offers USM Go Owners...

- Easy, pain- free upgrade path to A-Scan thickness capabilities at ~55 % of price of new gauge
- Similar GUI and identical package
- One package with 2 inspection capabilities flaw & A-scan thick







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## A high performance A-Scan thickness gauge in field-proven USM Go Package With Powerful Data Recorder and Field upgradeability to USM Go capabilities



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