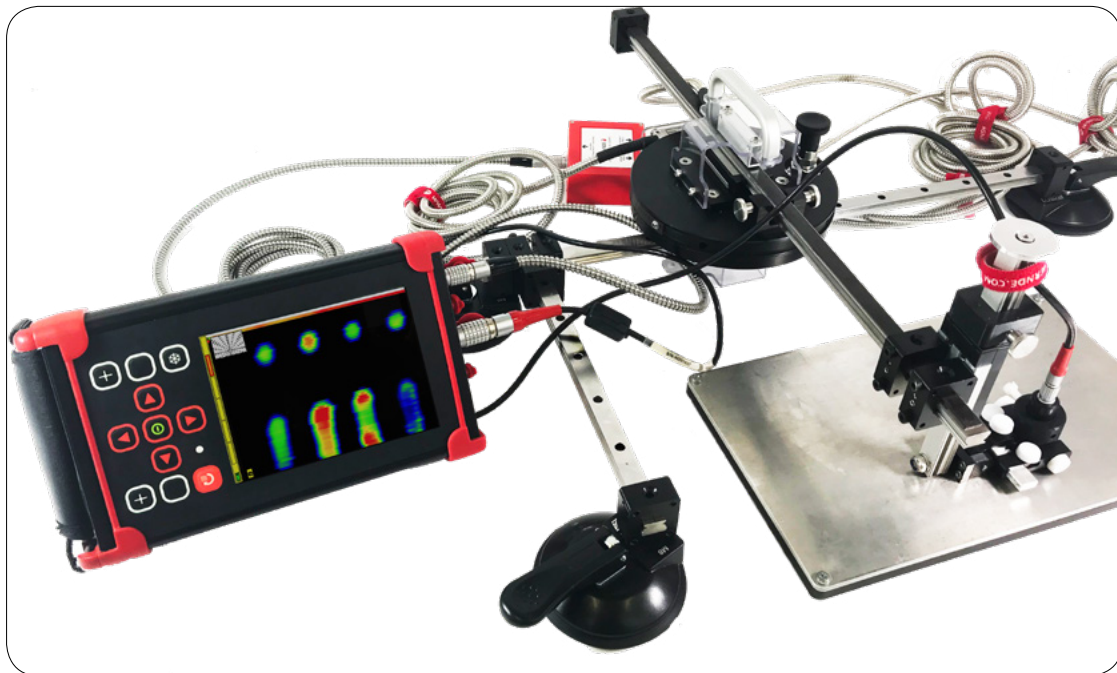


# **PHASECHECK**

**Dual Frequency High Performance Eddy Current  
Flaw Detector with C-Scan Capability**



- Based on the well respected AeroCheck+.
- Allows the connection of up to two encoders.
- Sharing the same look and feel user interface means that users will quickly be able to become familiar with operation.
- Ability to post analyse data for peer review and audit purposes.
- Readily incorporate C-Scan inspection results in a report.



They say “a picture is worth a 1000 words”. To date “pictures” (C-Scan) in Eddy Current has been limited to expensive large laboratory instruments. Now for the first time in a hand held high-end eddy current flaw detector package we add C-Scan data display capability.

The PhaseCheck carries all the features and performance of the AeroCheck+ Eddy Current Flaw Detector combined with the ability to scan areas and document inspection results using a C-Scan display and X/Y and R/Theta manual scanners with an easy scan calibration. Flexible encoder configuration will allow various scanner mechanisms to be interfaced.

C-Scan may be exported as a Bitmap, Excel Spread Sheet or raw data file for subsequent analysis.

Operating Modes	Eddy Current Modes	C-Scan		
		Eddy Current Single Probe Frequency		
		Eddy Current Dual Probe Frequency		
		Eddy Current 2 Probe, 2 Channel		
		Rotating Drive		
		Conductivity with thickness		
Probe	Connectors	12-Way LEMO 2B (Absolute, Bridge, Reflection, Rotary, Conductivity)		
		4-Way LEMO 0B (Bridge, Reflection)		
	Rotary	600-3000 rpm ETHER Drive(ADR002), Hocking Drive (33A100), Rohmann (MR3, SR1 & SR2) must use adapter ALL12-F08-020METH		
	Conductivity	Frequency	60kHz	
		Accuracy	0.5% -10% IACS better than +/-0.05% IACS	
			10% - 25% IACS better than +/-0.25% IACS	
			25%-60% IACS better than +/-0.5% IACS	
			60%-110% IACS better than +/-1% IACS	
			Lift Off corrected to 1.0mm	
		No temperature compensation		
All Errors at 90% Confidence Level				
Resolution	3 decimal points max			
Auto Resolution Mode AutoS = Legacy Instrument, Auto = SigmaCheck				
Encoder	Input	6-Way LEMO 1B (Encoder X,Y or R Theta). 1 or 2 encoders which can be used as XY or R-Theta in C-Scan mode.		
	Count Rate Max	100kHz		
C-Scan	Resolution	Max Size 1 million data points		
	Scaling	0.1-999.9 ticks/mm		
	Typical Scan	120 by 100mm (4.72" by 3.94") at 0.1mm (0.004") resolution		
	Data Saved	Data stored as XY pairs for 2 channels. Data presentation X, Y, R or Theta on CH1, CH2 or Mix		
Frequency		Single Frequency = 10Hz - 20MHz		
		Dual Freq. = 10Hz - 12.8MHz & Mix -18 to +18dB on output		
Gain	Overall	-18 to + 104dB, 0.1, 1 and 6dB steps (104dB maximum)	Drive	0dB, 6dB and 10dB (0dB reference 1mW into 50 ohm).
	Input	0dB or 12dB	Max X/Y Ratio	+/-100.0 dB
Phase	Range	0.0-359.9°, 0.1° steps		
	Auto Phase	Allows phase angle to be automatically set to a preset angle		
Filters	Normal High Pass	DC to 2kHz or Low Pass Filter, which ever is lower in 1Hz steps. Plus variable adaptive balance drift compensation 0.01 - 0.5 Hz (6 steps).		
	Normal Low Pass	1Hz to 2kHz or a quarter of the lowest test frequency, which ever is lower in 1 Hz steps.		
Balance Load	Manual	14 internal balance loads; 2.2µH, 5.0µH, 6.0µH, 6.5µH, 7.0µH, 7.5µH, 8.2µH, 12µH, 15µH, 18µH, 22µH, 30µH, 47µH, 82µH		
	Automatic	Optimised balance load selection.		
Alarms	Box & Sector	Fully configurable, Freeze, Tone or Visual.		
	Output	Open collector transistor (32v dc at 10mA max) available on 12 way lemo.		
Display	Type	5.7" (145mm), 18 bit Colour, daylight readable.		
	Viewable Area	115.2mm (Horizontal) x 86.4mm (Vertical)		
	Resolution	640 x 480 pixels		
	Flip	Manual or automatic screen orientation change to enable left or right handed use.		
	Configurable Screen	Full Screen, Single, Dual Spot or Dual Pane with variable size and location and function e.g. XY, Timebase, Waterfall and Meter.		
	Colour Schemes	User configurable Dark, Bright and Black & White		
	Display Modes	Spot, Time base (0.1-20 seconds x 1-200 sweeps, up to 55 seconds), Waterfall & Meter with peak hold and % readout, C-Scan.		
	Graticules	None, Grid (4 sizes 5, 10, 15 and 20% FSH), Polar (4 sizes 5, 10, 15 and 20% FSH)		
	Offset	Spot Position: Y =-50 to +50, X =-65 to +65%		
	Digital Spot	Display in X,Y or R,θ		
Removable Data Storage	Position Readout	Display of all settings in Legacy Format		
	Setup Storage	micro SD up to 32GB, holding over 10,000 settings		
	Stored Screen Shots	micro SD up to 32GB, holding over 10,000 screen shots		
	Record Replay	Comprehensive Record Replay & Storage, Real-time recording of trace data, replay on instruments & desktop PC up to 164 seconds		
General	C-Scan	Max 1000 data files		
	Power	8 hrs battery life, as per AeroCheck+		
	Size (w x h x d)	237.5mmx 144mm x 52mm (9.4" x 5.7" x 2.1")		
	Weight	1.2kgs, 2.7lbs		
	Operating Temp.	-20°C to +60°C..		
	IP Rating	IP54		
	Data Storage	Save Inspection data to SD Card*		
Export	of Inspection reports*			



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