Both the AeroCheck2 and AeroCheck+ are supplied with a standard "Two-Year Manufacturer Warranty".

This covers all components of the Instruments and only excludes customer damage or misuse.

The "Two-Year Warranty" can be extended to "Five Years" through purchase of "ETHERCover" Extended Warranty Protection.



#### SPECIFICATIONS AEROCHECK2 AEROCHECK+ Probe Connectors 12 Way Lemo 2b (Absolute, Bridge Simultaneous probe operation possible using Lemo 12 way and and Reflection) and Connection Lemo 00 (for single element Lemo 00 absolute probes). Rotary 600-3000 rpm - ETher Mercury Drive (ADR002), Hocking 33A100, Rohmann MR3, SR1 and SR2 Drive (special adapter needed) Frequency Single Freq. = 10Hz – 20MHz Dual Freq. = 10Hz - 12.8MHz & with range variable resolution. Mix -18 to +18dB on output -18 to + 104dB, 0.1, 1 and 6dB steps (104dB maximum) Gain Overall Input 0dB, 6dB and 10dB (0dB reference 1mW into 50 ohm). Drive Max X/Y Ratio +/-100.0 dB Phase 0.0-359.9°, 0.1° steps Range Auto Phase Allows phase angle to be automatically set to a pre set angle Filters Normal High Pass DC to 2kHz or Low Pass Filter, which ever is the lower in 1 Hz 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 Manual 14 internal balance loads; 2.2μH, 5.0μH, 6.0μH, 6.5μH, 7.0μH, 7.5μH, $8.2\mu H$ , $12\mu H$ , $15\mu H$ , $18\mu H$ , $22\mu H$ , $30\mu H$ , $47\mu H$ , $82\mu H$ Automatic Optimised balance load selection Alarms Box Fully configurable, Freeze, Tone or Visual. Sector Fully configurable, Freeze, Tone or Visual. Open collector transistor (32v dc at 10mA max) available on 12 way lemo. Output Display 5.7" (145mm), 18 bit Colour, daylight readable. Type Viewable Area 115.2mm (Horizontal) x 86.4mm (Vertical) Resolutiion 640 x 480 pixels Flip Manual or automatic screen orrientation change to enable left or right handed use. Colour Schemes User configurable Dark, Bright and Black & White Configurable Full Screen, Single, Dual Spot or Dual Pane with variable size and location Screen and function e.g. XY, Timebase, Waterfall and Meter. Display Modes Spot, Time base (0.1-20 seconds x 1-200 sweeps and up to 55 seconds), Waterfall and Meter with peak hold and % readout. 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 Position Readout Display of all settings in Legacy Format Summary Setup Storage micro SD up to 32GB, holding over 10,000 settings Removable Data Storage Stored Screen micro SD up to 32GB, holding over 10,000 screen shots Comprehensive Record Replay and Storage Shots Record Replay Real-time recording of trace data and Replay on instruments and desktop PC up to 164 seconds USB (Full PC remote control plus Real Time data) PC Connectivity Outputs Digital Volt Free On Lemo 12 way Open collector transistor (36v dc at 10mA max). Alarm Full 15 way VGA output VGA English, French, Spanish, Italian, Portuguese, Russian, Japanese, Chinese, Languages Turkish, Czech, Norwegian Verification The system includes on delivery a 2 year validity Verification Level 2 detailed functional check and calibration as per ISO 15548-1:2013 Level Power On Self The system performs a self test on start up of external ram, sd ram, accelerometer, Micro SD card, LCD screen buffer. Test External 100-240 v 50-60Hz 30 Watts Power Battery Internal 7.2V nominal @ 3100mAh = 22.32 watt.hr Running Time Up to 8 hours with a 2MHz Pencil Probe 30% Back Light and up to 6 hours with a Rotary Drive at 3000rpm 50% duty cycle. **Charging Time** 2.5 hrs. charge time, Simultaneous charge and operation. Physical Weight 1.2 kg, 2.7 lbs. Size $(w \times h \times d)$ 237.5mm x 144mm x 52mm / 9.4" x 5.7" x 2.1" Material Aluminium alloy Mg Si 0.5 powder-coated Operating Temp -20 to +60 °C Storage for up to 12 months -20 to +35 °C Nominal +20 °C Storage Temp IP Rating

#### ADVANCED FEATURES

Advanced	Guides	Create and display a slide show
Features		containing instructions, tutorials and
		procedures using Microsoft
		PowerPoint.
	Attachments	Screenshots and Data Recordings are
		saved in a folder with the name of the
		Settings.
	Loop	Capture a live repetitive signal and
		then optimise the instrument settings
		(Phase, Gain, Filters) to simplify
		optimising the parameters
	Trace	Allows a calibration reference signal
		to be stored on the screen and then
		compared with the live signal
	Data Output	Real-time post processed over USB at
		8kHz overall for all 3 data pairs (X, Y
		and Mix) with DLL for embedding
		functionality into software.

#### CONDUCTIVITY SPECIFICATION (AEROCHECK+ ONLY)

out of the control of			
Frequency	One frequency only 60kHz standard (choice of 120, 240 and 480kHz)		
Acccuracy	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		

## **EQUIPMENT KITS**

### STANDARD AEROCHECK SERIES KITS

IAER003 Instrument, AeroCheck2, Single Frequency (20Hz-20MHz), Hand Held Portable Flaw Detector, Software + Manual on USB Stick IAER002 Instrument, AeroCheck+, Dual Frequency (10Hz-12.8MHz) Hand Held, Portable Flaw Detector, Software + Manual on USB Stick, with Rotary & Conductivity at 60kHz Functionality

AWEL002 AeroCheck Power Adapter + Input Plugs (UK, EU, US & Australia)

AWEL003 Adjustable Shoulder Strap, Padded with Quick-Release AC006 Instrument Soft Carry Case

A090 USB Cable, A to MIN B

40463 Quick Reference Card

ALLCX-M02-015A Lead, Lemo 00 to Microdot, 1.5m (Absolute) ALL12-L04-015R Lead, Lemo 12-Way - Lemo 4-Way (Reflection)

# **OPTIONAL ACCESSORIES**

AAER002 Hard Transit Case

AAEROO4 Protective Splash Proof Cover (WeldCheck2, WeldCheck+, AeroCheck2, AeroCheck+)

AWELOO6 External, 8 x AA Battery Holder with On/Off Switch

AWEL008 In car Power Adapter

ALL12-L04-015R Lead, Lemo 12-Way - Lemo 4-Way, 1.5m (Reflection) ALL12-L04-015B Lead, Lemo 12-Way - Lemo 4-Way, 1.5m (Bridge)

ALLCX-M02-015A Lead, Lemo 00 to Microdot, 1.5m (Absolute)
ALLCX-B02-015A Lead, Lemo 00 to BNC, 1.5m (Absolute)

ARD002 Mercury (mini) Rotary Drive

ALL12-L12-020M Lead to connect Mercury (mini - ARD002) Rotary Drive, Lemo 12-Way, 2m

ALL12-F08-020ETH Adapter, lead to connect Rohmann Rotary Drive MR3, SR1 and SR2, Lemo 12-Way, 2m.

40470 Tripod Bracket To fit 1/4" Camera Tripod Mount with Male Screw

#### **PROBE KITS**

KASUR001 KIT Surface Inspection (4 probes, lead and Al and Fe Test Block)

KASUBS001 KIT Sub Surface Inspection, Low Frequency (2 probes, lead and test piece)

KAROT001 KIT Mercury Rotary Drive and Cable Only
KACON001 KIT Conductivity Kit (Probe, Calibration and Cable) (AEROCHECK+ only)

