ACS ACOUSTIC CONTROL SYSTEMS

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A1580 SONIC

Universal Ultrasonic Pulser-Receiver Unit with WiFi Data Interface for Wide Range of UT applications

- **Flexible excitation frequency setting** – arbitrary bipolar burst configuration within the specified frequency range

- **Wireless Data Interface** - Ethernet connection via WiFi

- **Conformance** piezoelec transducers by ACS and other manufacturers

- **Versatile** Software Developer Kit with detailed documentation for system integrators

Specification:

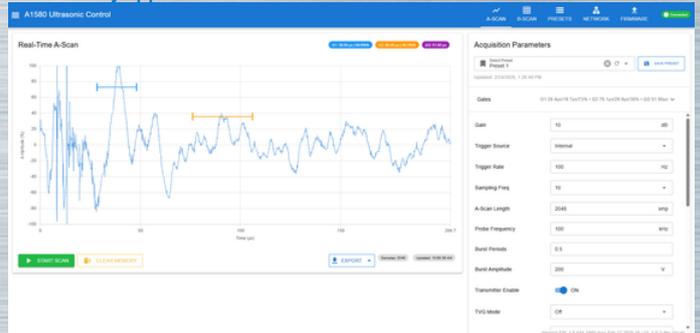| PARAMETER	Value
TRANSMITTER	
Transmitter output voltage, V	± 200 Volt (400 Vpp)
Excitation sequence, periods	Meander, 0.5 to 8.0
Pulse repetition rate, Hz	1 – 3,500 Hz
RECEIVER	
Data acquisition length, Samples	128 k
Sampling rate (MHz)	1, 2, 5, 10, 25, 50, 100
Filter	User-configurable band-pass filter
Receiving bandwidth, KHz	10 - 15,000
Dynamic range of amplifier, dB	80
Additional preamplifier stage, dB	20
Gain setup range, dB	80 with the step of 0.1 dB
Number of the programmable DAC points	128
Dynamic range of DAC function, dB	80
Averaging factor	1 to 256
INTERFACES	
Wireless Ethernet	IEE802.11n, 54 Mbit
Wired Ethernet	100 Mbit
External Trigger input	TTL / CTP / RS485
Sync input	USB-C plug
Sync output	USB-C plug
Power input	USB-C plug, PoE
Transmitter	BNC
Receiver	BNC
DIMENSIONS & WEIGHT	
Dimensions of the electronic block, mm	116 x 56 x 230
Weight of the electronic block, kg	0.5

Special features:

- Extraordinary **signal quality & signal-to-noise ratio** due to optimal excitation

- **Diverse UT operation modes:** pulse-echo, transmitter-receiver and through-transmission

- **Scalablility** through cascaded synchronous operation of multiple ultrasonic units

- **Free demo-software** "MATHILDA" for basic measurement applications

Scalable burst excitation pulse sequence ±200 V

Introductory application software "Mathilda"

Delivery set:

MADE IN GERMANY

Item	Quantity
A1580 Sonic LF – Electronic Unit	1
Net adaptor	1
Cable USB Type-C	1
Ethernet cable RG45	1
Cable BNC to Lemo00	1
Introductory application software „Mathilda" for basic measurement applications (available for download at at www.acs-international.com)	1
Hard case	1

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