

A1560 SONIC-AIR

Universal OEM Ultrasonic Pulser-Receiver Unit with
WiFi Data Interface for Low-Frequency UT applications



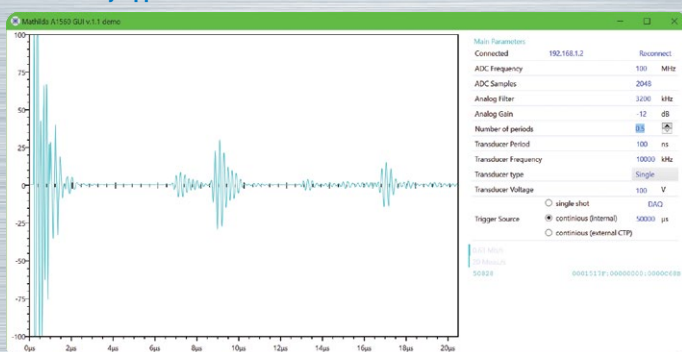
- **Flexible excitation frequency setting**
– arbitrary bipolar burst configuration within specified frequency range (half-cycle duration, number of half-cycles)
- **Wireless Data Interface** –
Ethernet connection via WiFi
- **Embedded Battery** – integrated accumulator for stand-alone applications
- **Conformance** with all DPC and regular piezoelectric 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 5.0
Pulse repetition rate, Hz	1 – 1.000 Hz
RECEIVER	
Data acquisition length, Samples	128k
Sampling rate (MHz)	1, 10, 25, 50, 100
Filter frequencies (FIR)	HF 10,20,40,100kHz; LF 1.000kHz
Receiving bandwidth	10 – 350 kHz
Dynamic range of amplifier, dB	0 to 80
Dynamic range of attenuator, dB	- 20 to 0
Gain setup range	from 0 to 100 dB, step 1 dB
The quantity of the programmable points of DAC function	128
Dynamic range of DAC function	40 dB
Averaging factor	1 to 256
POWER SUPPLY	
Embedded power source	Built-in battery
Operation time of the battery, not less than	5 h
Battery charging time	2.5 h
External power supply	DC 15 V, 4A \ AC 110-250 V
DATA INTERFACES	
Wireless Ethernet 54 Mbit	IEEE802.11n
Ethernet 100 Mbit	
External trigger input	TTL
DIMENSIONS & WEIGHT	
Dimensions of the electronic block	260 x 156 x 43 mm
Weight of the electronic block	800 g

Introductory application software "Mathilda"



Special features:

- Extraordinary **signal quality & signal to noise ratio** due to optimal excitation
- **Diverse UT operation modes:** pulse-echo, transmitter-receiver and through-transmission
- **Scalability** through cascaded synchronous operation of multiple ultrasonic units
- **Free demo-software "MATHILDA"** for basic measurement applications



Scalable burst excitation pulse sequence ± 200 V



Delivery set:

MADE IN GERMANY

Name	Quantity, pcs.
A1560 Sonic-Air – Electronic Unit	1
Net adaptor with cable 220V / 110V – 15V	1
Ethernet cable 1.5 meter	1
WiFi Antenne	1
User manual for integration kit (SDK)	1
Introductory application software „ACS "Mathilda" Windows GUI App“ (available at www.acs-international.com)	1
Hard case	1