

A1560 SONIC-LF

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



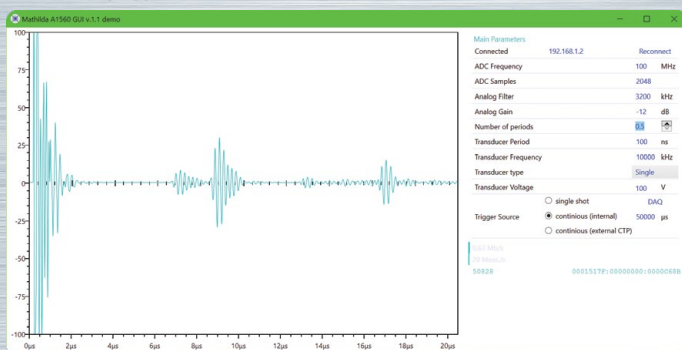
- **Flexible excitation frequency setting** – arbitrary bipolar burst configuration within specified frequency range (half-cycle duration, number of half-cycles)
- **Wireless Data Interface** – Ethernet connection via WiFi
- **Embedded Battery** – integrated accumulator for stand-alone applications
- **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 350kHz |
| 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 LF – 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 |