A1052 MultiSONIC

Multichannel Ultrasonic Pulser-Receiver Unit
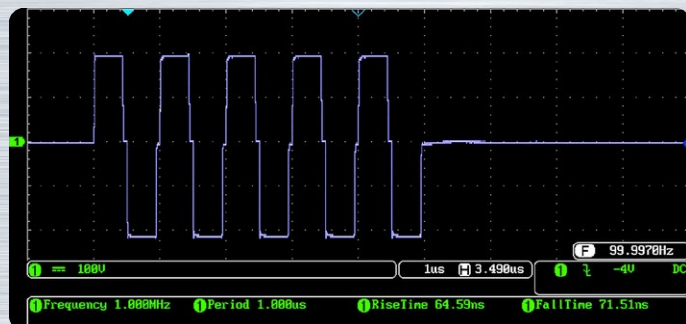## with WiFi Data Interface for Low-Frequency UT applications

- **32 parallel pulser-receiver channels**
  for flexible system configuration

- **Wireless Data Interface**
  Ethernet connection to PC, Smartphone or Tablet-PC via WiFi

- **Conformance**
  with all Dry-Point-Contact transducers by ACS

- **Flexible excitation frequency setting**
  arbitrary bipolar burst configuration within specified frequency
  range (half-cycle duration, number of half-cycles)

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

Specification:

Parameter	Value
TRANSMITTER	
Number of transmitting channels	32
Transmitter output voltage, V	± 200 Volt (400 Vpp)
Excitation sequence, periods	Meander, 0.5 to 5.0
RECEIVER	
Data acquisition length, Samples	128k
Sampling rate (MHz)	1, 4
Filter frequencies (FIR)	HF 10,20,40,100kHz; LF 350kHz
Receiving bandwidth	20 – 250 kHz
Dynamic range of amplifier, dB	0 to 60
Dynamic range of DAC function	40 dB
Averaging factor	1 to 256
POWER SUPPLY	
Number of receiveing channels	32
Power source	Exchangable battery
Operation time of the battery, not less than	8 h
Battery charging time	2.5 h
External power supply	DC 15 V, 4A \ AC 110-250 V
DATA INTERFACES	
Wireless Ethernet 54 Mbit	IEE802.11n
DIMENSIONS & WEIGHT	
Dimensions of the electronic block	200x125x100 mm (7,9 x 4,9 x 3,9 inch)
Weight of the electronic block	2.4 kg / 5.5 pounds

Scalable burst excitation pulse sequence ±200 V

Special features:

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

- Excitation of **Golay Coded Sequences** for improved SNR is possible

- **Stand-alone on-site operation** due to battery powered

- **Free demo-software "MATHILDA^{32}"** for basic measurement applications

Delivery set:

MADE IN GERMANY

Name	Quantity, pcs.
A1052 MultiSONIC – Electronic Unit	1
Net adaptor with USB Type C power cable	1
Exchangeable Li-Ion batteries 18650	6
Lemo00 to Lemo00 cables	2
Free demo SW for smartphone / tablet PC / PC	1
Integration kit for software development by user	1