



VERY HIGH BANDWIDTH

LARGE QUANTITY OF FILTERS

EXTREMELY LOW NOISE

POWERFUL SPIKE PULSER

BROADBAND ULTRASONIC PULSER-RECEIVER

SONO-PR 200

FOR NON-DESTRUCTIVE TESTING

MADE IN GERMANY

SONOTEC 

RELIABLY REPLACES OBSOLETE TECHNOLOGY

VERY LARGE BANDWIDTH

Thanks to its extremely wide frequency range, the SONO-PR 200 pulser-receiver covers various areas of application: from ultrasonic testing on the widest range of materials including wall thickness measurement to immersion technology and squirter applications through to acoustic microscopy.

The possibility of remote control via serial interface, various trigger options as well as digital inputs and outputs make the SONO-PR 200 ideal for integration into automated testing facilities.

NUMEROUS HIGH PASS AND LOW PASS FILTERS

The individually configurable high and low pass filters enable specific adjustment to the application in order to achieve a max. signal-to-noise ratio.

POWERFUL SPIKE PULSER

The minimal rise times of < 1 ns enable optimum excitation of high-frequency test heads. Furthermore, the variety of adjustable energy levels enables the widest range of designs of ultrasonic transducers to be actuated.



SONO-AMP PRE-AMPLIFIER OPTIONALLY AVAILABLE

By adding the SONO-AMP pre-amplifier, a fixed gain of 74 dB can be achieved. By combining a SONO-AMP, the system achieves an extremely low inherent noise of < 1 nV/ $\sqrt{\text{Hz}}$. Thanks to a low noise level and high bandwidth, tests can therefore also be realised under challenging conditions.

General specifications

Standards	2011/65/EU RoHS, 2014/30/EU 2014/35/EU, DIN EN 61326-1:2013
Protection class	IP 20
Bandwidth	0,1 MHz to 200 MHz
Measurement methods	Impulse-Echo, Pulser-Receiver
Operating temperature	0 °C to + 60 °C
Storage temperature	-20 °C to + 80 °C
Display	4.3" LCDTFT colour screen display 480 x 272 pixels, touch panel
Rack	19" / 2 HE (optional base)
Power supply	110 / 220 V; 50 / 60 Hz

Pulser

Pulse shape*	Spike pulse
Pulse repetition rate	10 Hz to 20 kHz
Energy levels	1, 2, 4, 8, 16, 32 μJ
Rise time	< 1 ns
Open circuit voltage	180 V
Impedance	6,5; 10; 16; 20; 26; 30; 40; 50 Ohm

Receiver

Fixed gain	26 / 40 / 54 dB
Output attenuation	0 - 65,5 dB (in steps of 0.5 dB)
Impedance	50 Ohm
Bandwidth	100 kHz to 200 MHz (-3 dB)
High pass filter	100 kHz (no filter), 1 MHz, 3 MHz, 10 MHz
Low pass filter	200 MHz (no filter), 100 MHz, 50 MHz, 20 MHz
Input noise level	2nV/ $\sqrt{\text{Hz}}$ **

* Rectangle pulser optionally available

** Gain: 54dB; Attenuation: 0dB; full bandwidth

Technical data subject to change without any notice. (Rev. 2.0 / 2020-09-21)

Trigger

Mode	Internal and external
Max. trigger	20 kHz
Trigger output	5 V / 20 μs

Interfaces

Communication	RS232
Switch output	4 x 5 V 200 mA, short circuit proof

SONO-AMP (optional)

Fixed gain	20 dB
Bandwidth	30 kHz to 5 MHz
Input noise level	$< 0,5$ nV/ $\sqrt{\text{Hz}}$ (500kHz to 5MHz)

SERVICE & SUPPORT

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