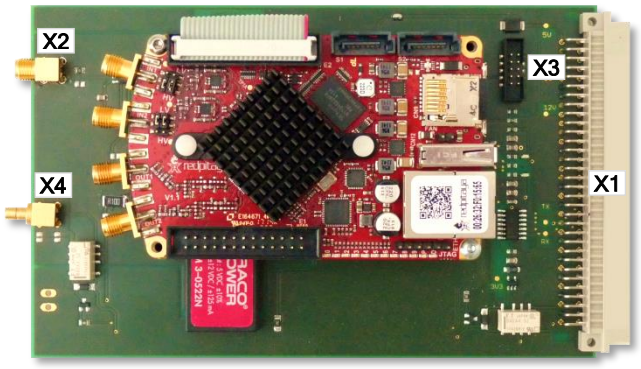
GUARDIAN TEST SYSTEM Item no. 21317

WFG2

Features

- Guardian baseboard with Red Pitaya waveform generator
- Sine, triangle and square waves
- Amplitude ±10V and DC offset ±10V
- Frequency range 0.1Hz to 10MHz
- Signal switchable to SMB female connector or analog bus



WFG2 card

The Red Pitaya module that was developed by STEM-Lab (https://www.redpitaya.com) has been integrated into our Guardian test system with a baseboard. The baseboard controller firmware communicates with the WinGuard software and the module via two UART interfaces. The baseboard amplifies the signal of the module by a factor of 10 to ±10V and switches the output for each relay via the SMB female connector either to the power connector of the Guardian system or the system's analog bus 3+4. This allows the signal to connect to the desired test points via the test device's relay matrix.

Application

- Testing audio components
- Clock generator
- Control of components with PWM inputs
- Sine wave signals for LCR measurements
- DC voltage transmitter

Addressing

The standard card address is 62 and is configured by the software.

Pinout

X1, system connector

Pin	Signal
AC1	+5 V
A2	GND
C2	RXD +
A3	RXD -
C3	GND
A4	TXD +
C4	TXD -
AC5	GND
AC21 (analog bus 3)	Out+ (switchable via relay)
AC23 (analog bus 4)	GND ((switchable via relay)
AC32	GND

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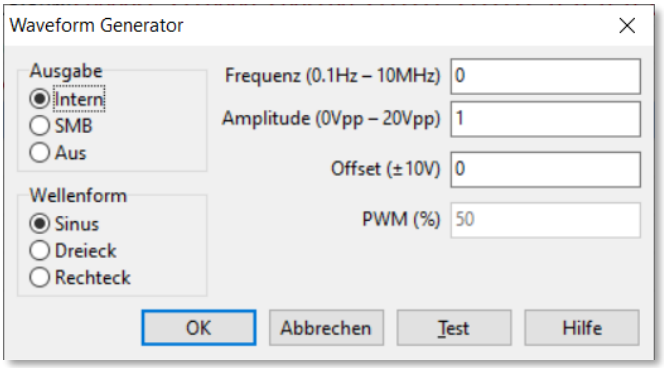
Specification

Current consumption	max. 80mA
Dimensions	160 x 160 cm
Interface	RS-422 with Guardian log
Signal resolution	14Bit
Output voltage	±10V, impedance 100 Ohm, can be switched off with two pins via relay
X1	System connector, 64-pin multipole connector DIN 41612
X2	Baseboard amplified input, SMA female
X3	Programming plug, 10-pin header RM 2.0
X4	Signal output, SMB male
	The connectors of the Red Pitaya module are reserved and must not be used.

WinGuard



Dialog box to control the WFG2 card. Pulse width modulation PWM is only possible in the presence of square wave signals.