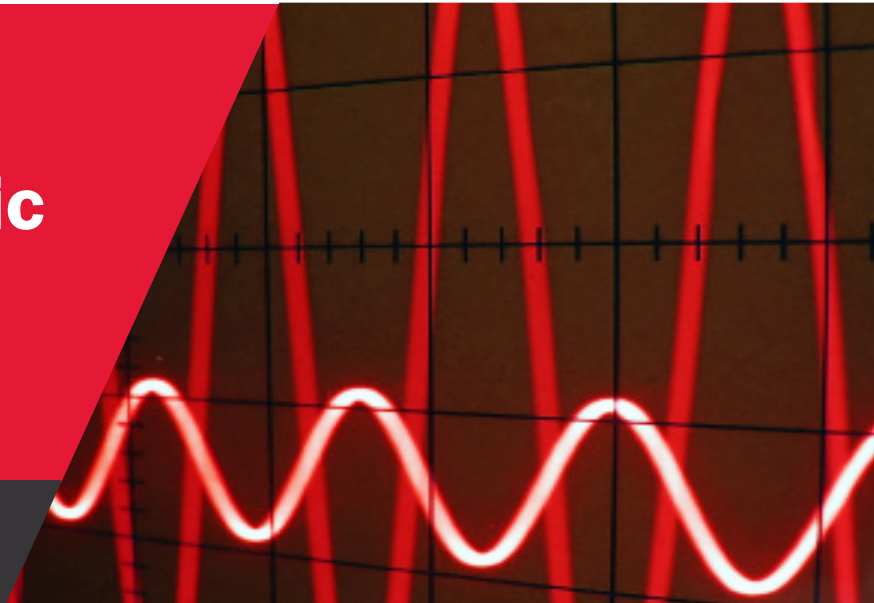


High Power Ultrasonic Instrument

temate® PXI Pulsar/Receiver



Equipment Highlights

- Complete C++ Software Development Kit for custom applications.
- Pitch-Catch and Pulse-Echo modes.
- Internal or External Trigger Mode.
- External 5VDC Trigger Input with Configurable Divider (e.g. Encoder Trigger).
- External Trigger Output for Electromagnet Pulsar Control.
- Synchronized 5VDC Output.

The temate PXI Pulsar/Receiver is a high-power ultrasonic instrument designed to be installed on a standard PXI or CompactPCI chassis. The instrument provides 8kW (1200Vpp toneburst) of power which is ideal for researchers and integrators interested in a compact, high-power ultrasonic instrument to drive both Electro Magnetic Acoustic Traducers (EMAT) and piezoelectric transducers (standard or air-coupled).

The pulser can be operated directly from any PXI compatible computer using dedicated software that permits modifying pulsing parameters. Additionally, factory provided drivers are available to set-up the equipment for use with a wide variety of third-party applications. The received signal can be viewed in a variety of ways including; display on the host computer, an external oscilloscope, or streamed to another application. Data streaming can include time-of-flight (TOF) analysis and Peak-

Amplitude for up-to three independent gates or the complete waveform of the signal, all at full Pulse Rate Frequency (PRF).

The unit permits operation in Pitch-Catch or Pulse-Echo modes using a built-in Transmit/Receive switch. The temate PXI Pulsar/Receiver is the most power-dense instrument in the market and is the only high-power ultrasonic tone-burst pulser available that can be integrated in both conventional PXI or CompactPCI chassis.

Innerspec Technologies is headquartered in Forest, VA with offices in Europe, China, and Mexico. With over 20 years experience, Innerspec is the world leader in designing, manufacturing, and fielding



temate® PXI Pulser/Receiver

Part Number	245A0235
Frequency Range*	100 kHz to 6 MHz
Output Power Peak	1 Channels x 0.17kW-8kW @50 Ohms
Max. Duty cycle	0.25% per Channel
Maximum PRF	2000 Hz
Output Power Average	20W per Channel (Maximum Power)
Voltage peak to peak	150V-1200V
High Power Signal Out	1 BNC
Receiver	50 Ω Input Impedance, -10 dB to 70 dB Gain, 0.3 dB Gain Resolution, Additional 30dB Pre-Amplifier, 8 Low Pass RF Filters; (Off, .1, .2, .5, 1, 2, 5, 10 MHz) 8 High Pass RF Filters; (Off, .1, .2, .5, 1, 2, 5, 10 MHz)
Monitor (O-Scope) connector	1 BNC
Indicators	Power on, Voltage out, Thermal and External Trigger indicator
Temperature	32 °F (0 °C) to 105 °F (40 °C)
Humidity	95% non-condensing Humidity
Protection	Thermal, fuse (including open & short circuit operation)
Electric Power Input	Provided by the PXI/cPCI chassis
Dimensions	4 Slot PXI/cPCI
Weight	0.8 kgs (1.76 lbs)

