



2.4 GHz to 2.5 GHz ISM Band Radar Demonstration Kit, USB or Bluetooth Control, GUI, Includes Radar Board, Antennas and Cables

Radar Development Kit Technical Data Sheet

PEM11000-KIT

Features

- 2.4 GHz ISM Band, Output Waveforms: Single Tone, Frequency Ramp, Sawtooth
- Audio Received Signal
- Onboard speaker and signal indicator
- Onboard custom tunable filter
- Operating Modes: CW, FMCW, Doppler
- Command Control via USB or Bluetooth
- Powered through USB connection
- Kit comes with radar board, antennas, and cables

Applications

- Classroom Learning Tool
- Demonstration
- Research & Development

Description

The PEM1100-KIT radar demonstration kit operates across the International 2.4 GHz ISM band (2.25 to 2.5 GHz). Output signals can be transmitted via single tone, frequency ramp, or sawtooth patterns. The received signal is downconverted to audio frequencies that can be monitored via an onboard speaker and received signal strength indicator. Also included is an onboard prototype filter for custom filtering options. Model PEM1100-KIT is controlled either through the onboard USB port or a Bluetooth connection, and supports GUI command control for Windows. This basic kit for demonstration and instruction purposes includes a radar circuit board, antennas, and cables. A downloadable operators manual is available on the Pasternack website.

Performance by Frequency

Description	Min.	Typ.	Max.	Units
Frequency Range	2.4		2.5	GHz
Output Power Sweeping CW Mode			1 0.125	Watt
Operating Voltage		5		Volts
Operating Current			0.5	Amps
ADC		16		Bits
ADC Sampling Frequency		20		kHz
Bluetooth Version		2.1 + EDR		

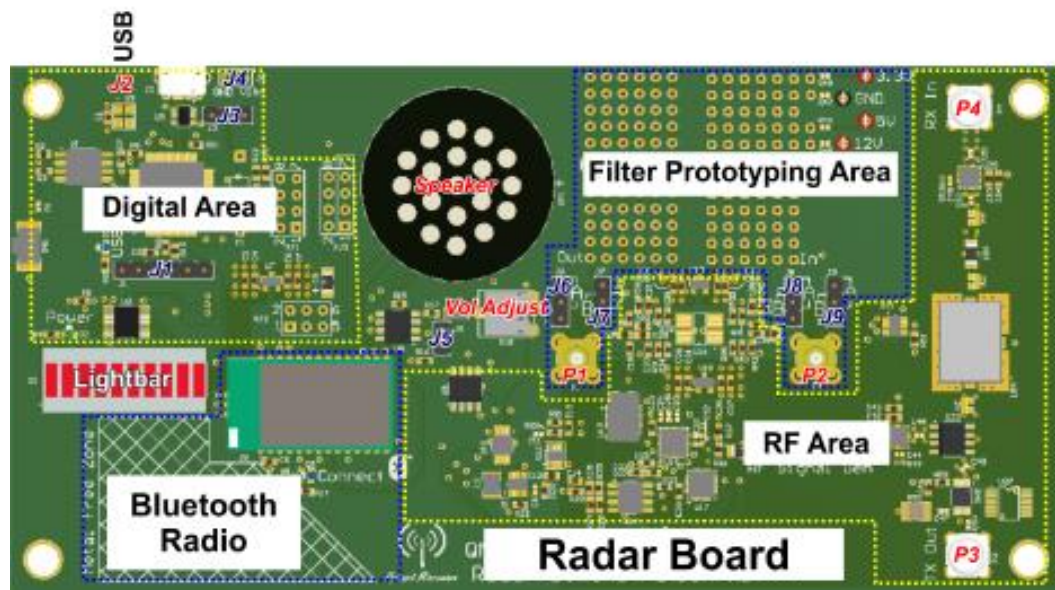
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4 GHz to 2.5 GHz ISM Band Radar Demonstration Kit, USB or Bluetooth Control, GUI, Includes Radar Board, Antennas and Cables PEM11000-KIT](#)



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The PEM11000-KIT Radar board, as viewed from above

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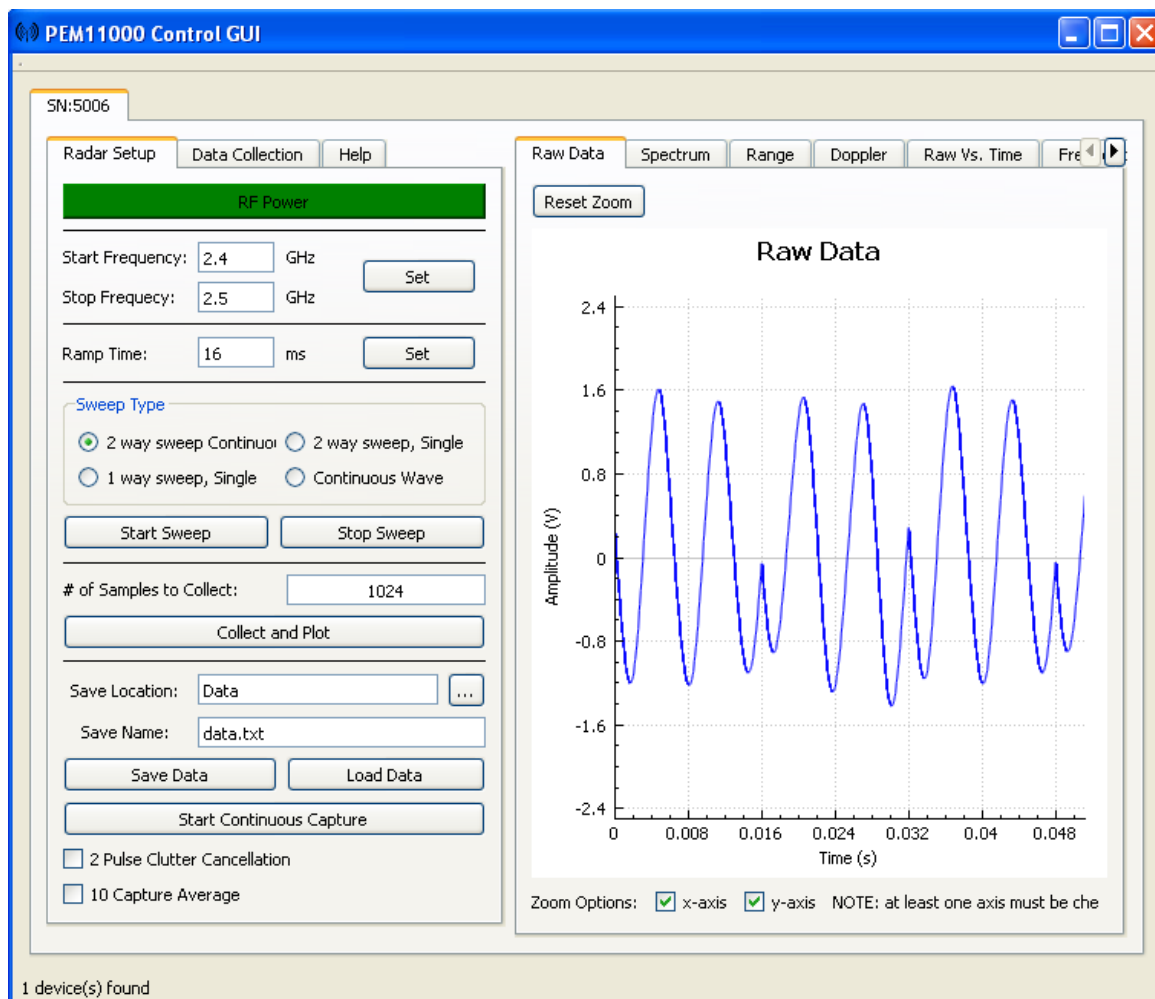


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Typical Performance Data



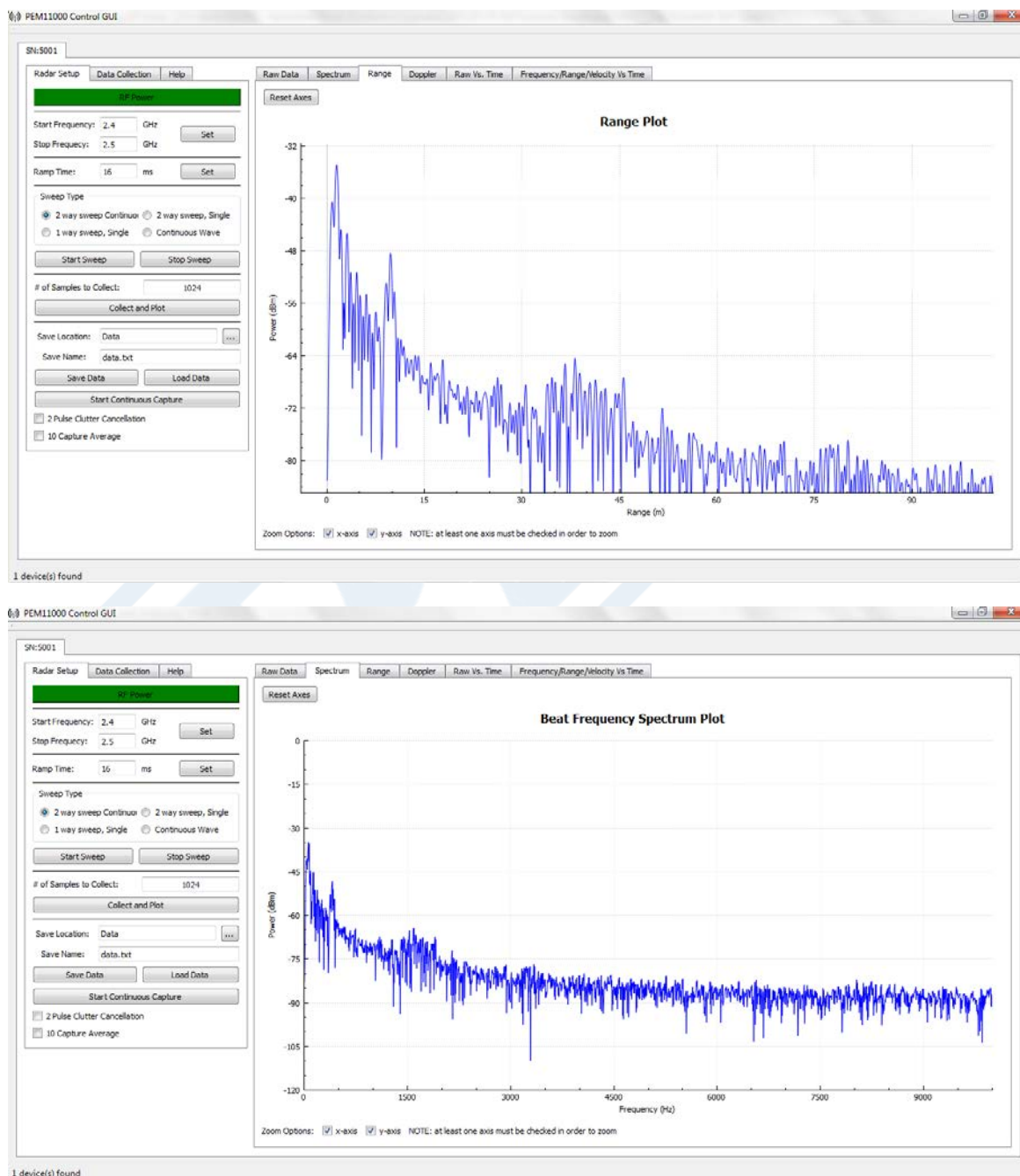
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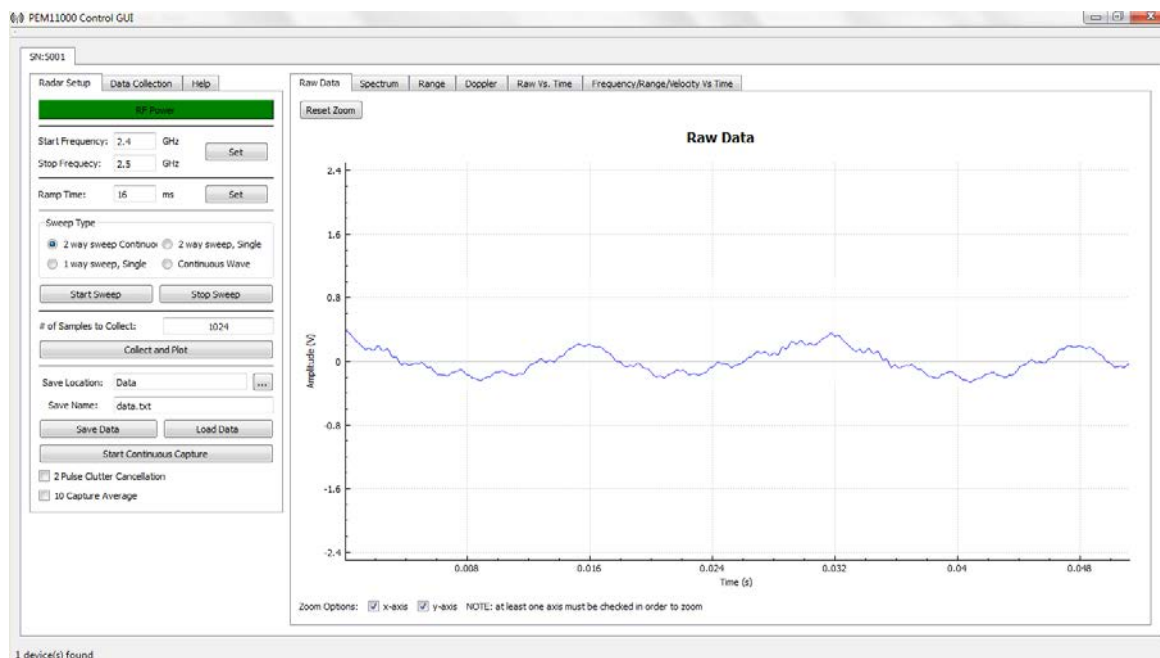
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2.4 GHz to 2.5 GHz ISM Band Radar Demonstration Kit, USB or Bluetooth Control, GUI, Includes Radar Board, Antennas and Cables from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

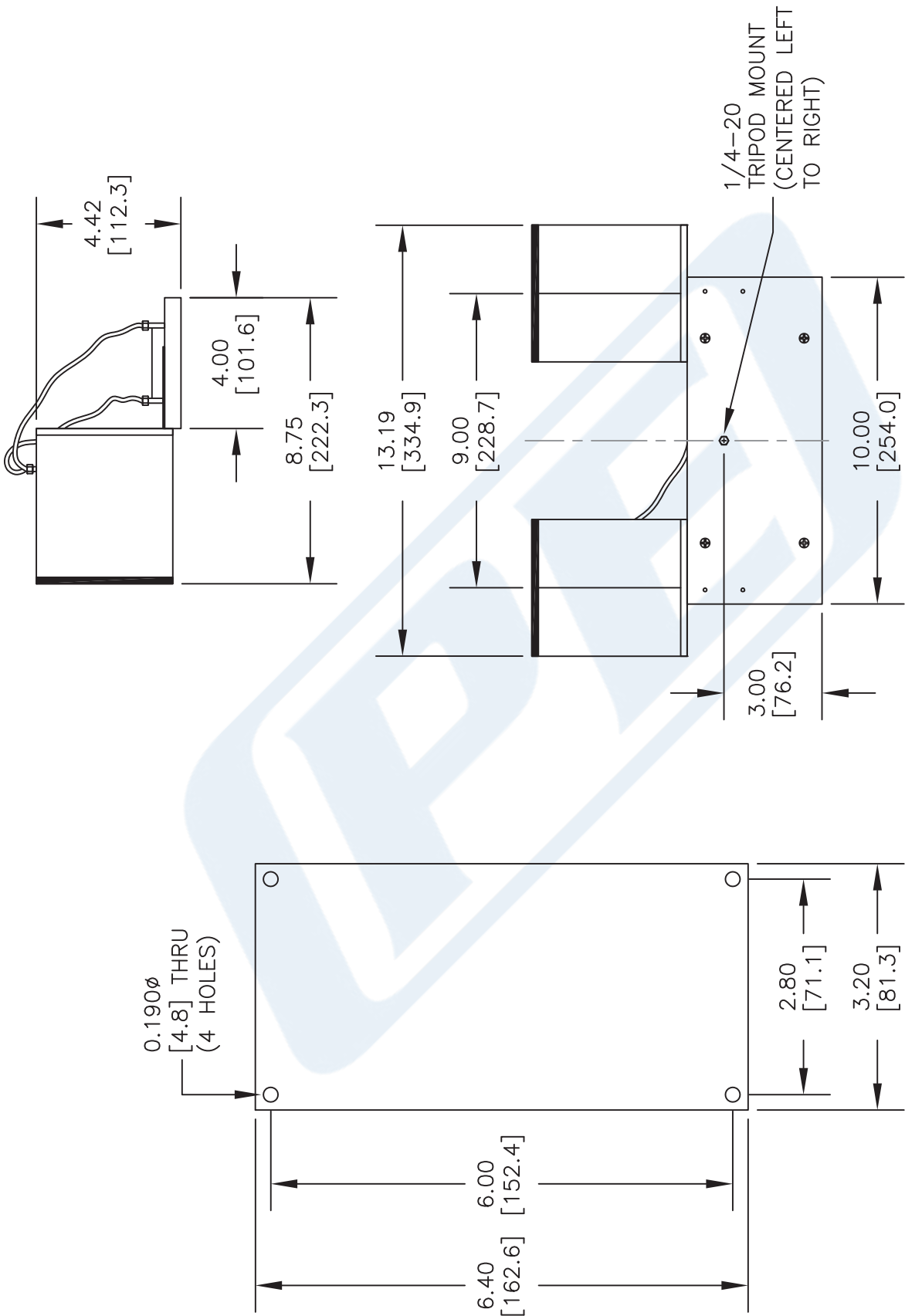
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4 GHz to 2.5 GHz ISM Band Radar Demonstration Kit, USB or Bluetooth Control, GUI, Includes Radar Board, Antennas and Cables PEM11000-KIT](https://www.pasternack.com/2.5-ghz-radar-development-system-pem11000-kit-p.aspx)

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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PEM11000-KIT CAD Drawing

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Control, GUI, Includes Radar Board, Antennas and Cables



FULLY ASSEMBLED DIMENSIONS
(KIT 2 & 3)

DWG TITLE

PEM11000-KIT

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

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FSCM NO. 53919

CAD FILE 021016

SCALE N/A

SIZE A

2233