



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

Radar Development Kit Technical Data Sheet

PEM11002-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, mounting plate, tripod, and USB battery pack.

Applications

- Classroom Learning Tool
- Demonstration
- Research & Development

Description

The PEM1102-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 PEM1102-KIT is controlled either through the onboard USB port or a Bluetooth connection, and supports GUI command control for Windows. The kit comes complete for field demonstration and instruction purposes with a radar circuit board, antennas, cables, mounting plate, tripod, and USB battery pack. 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			1	Watt
Sweeping			0.125	
CW Mode				
Operating Voltage		5		Volts
Operating Current			0.5	Amps
ADC		16		Bits
ADC Sampling Frequency		20		kHz
Bluetooth Version		2.1 + EDR		

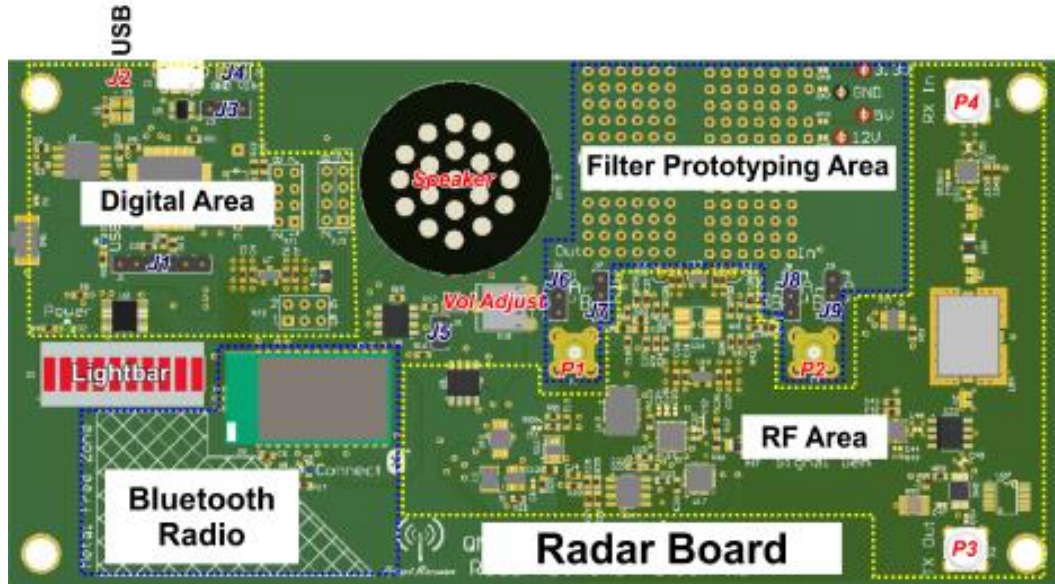
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.4 GHz to 2.5 GHz ISM Band Radar Demonstration Kit, USB or Bluetooth Control, GUI, Includes Radar Board, Antennas, Cables, and Accessories PEM11002-KIT](#)



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The PEM11000-KIT Radar board, as viewed from above

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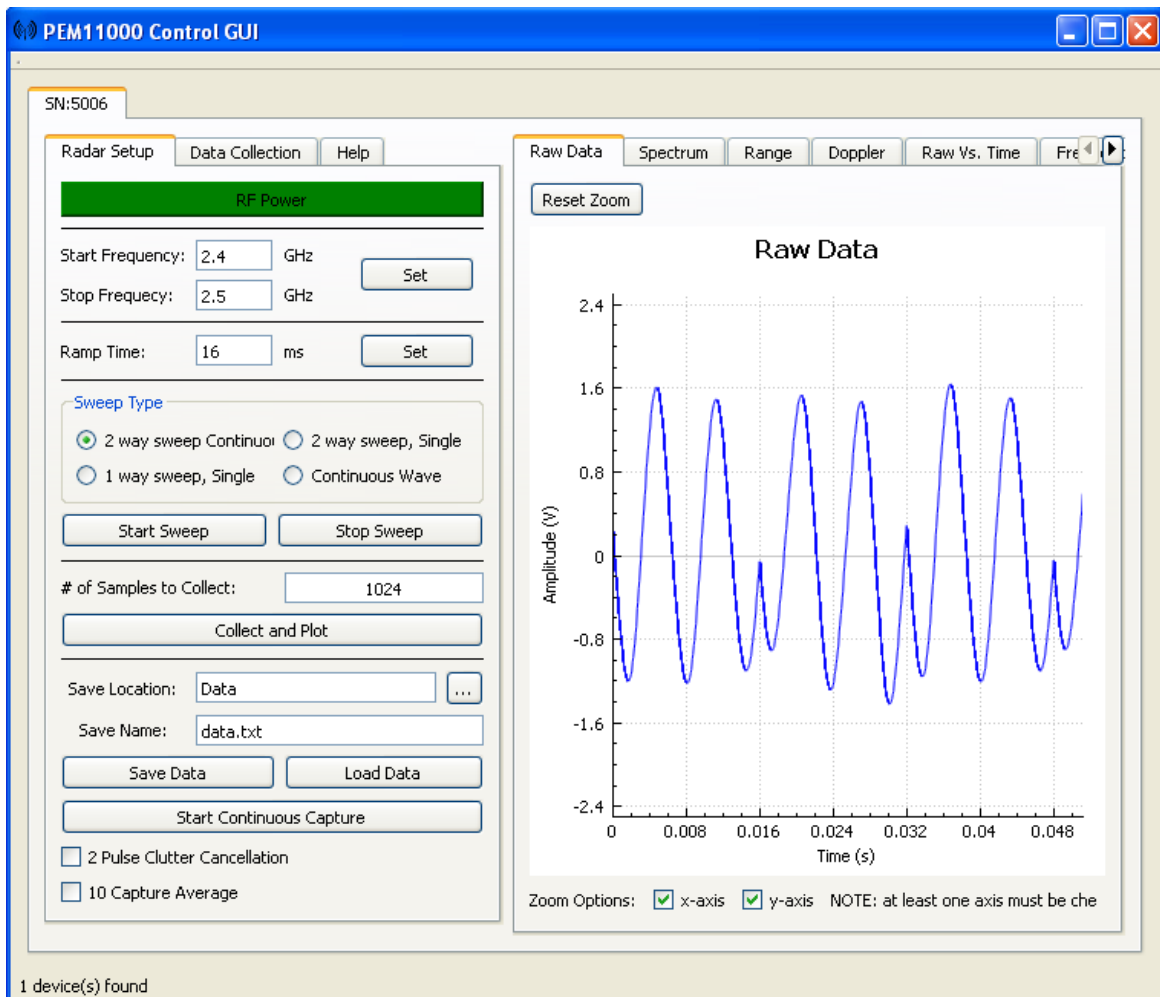


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Typical Performance Data



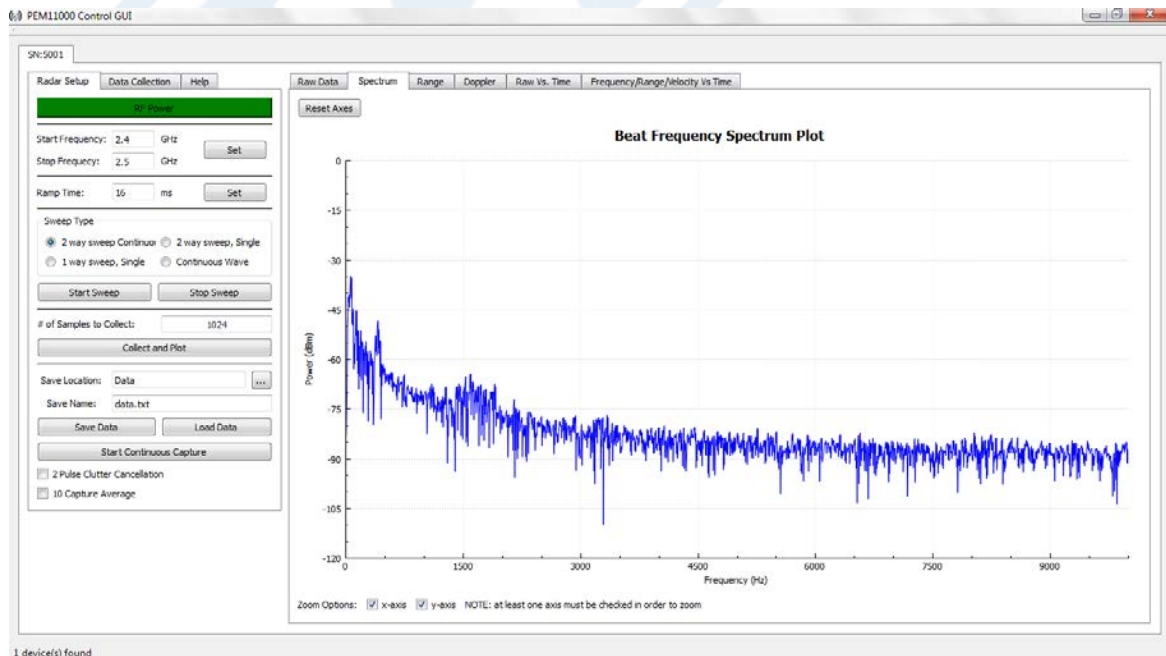
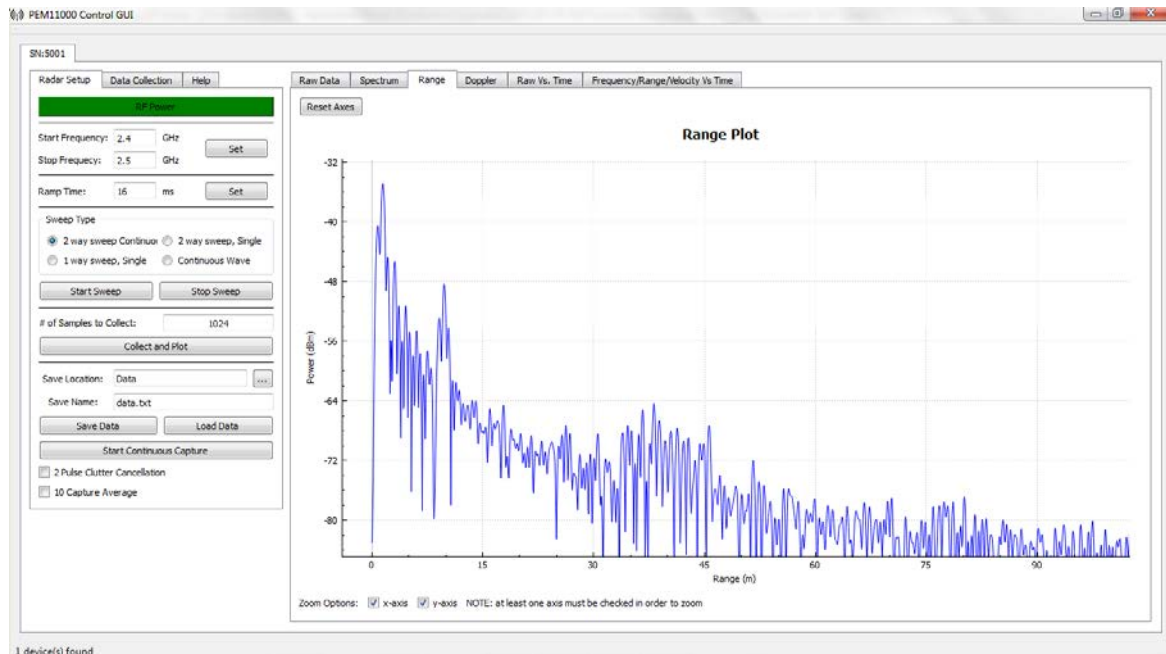
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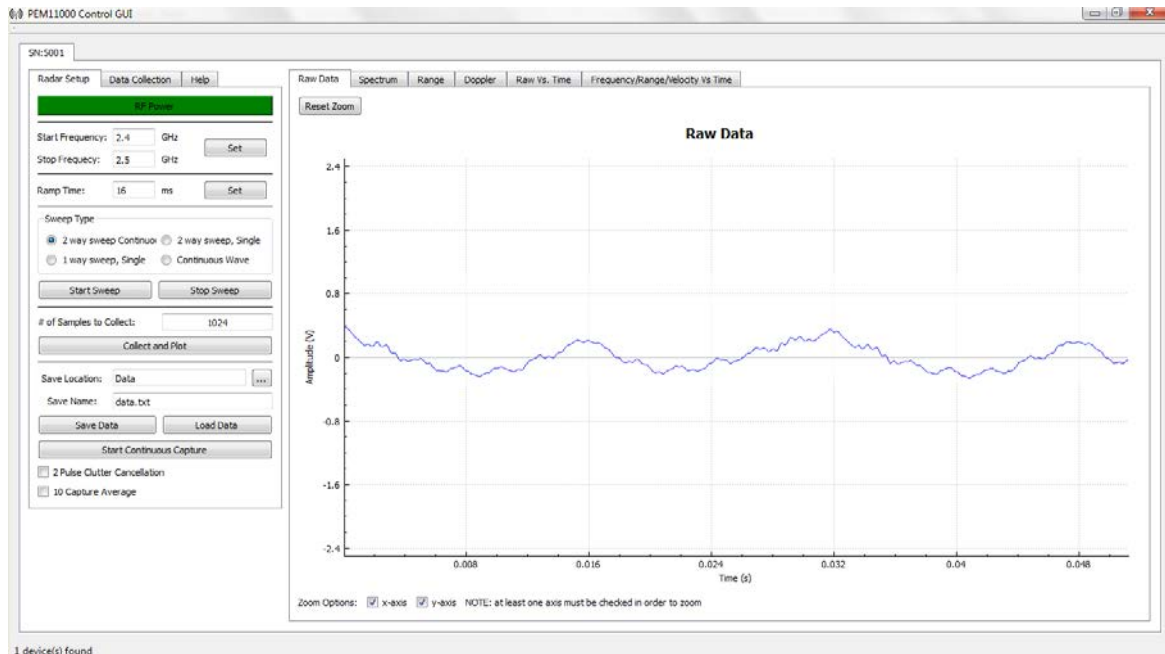
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2.4 GHz to 2.5 GHz ISM Band Radar Demonstration Kit, USB or Bluetooth Control, GUI, Includes Radar Board, Antennas, Cables, and Accessories from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and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

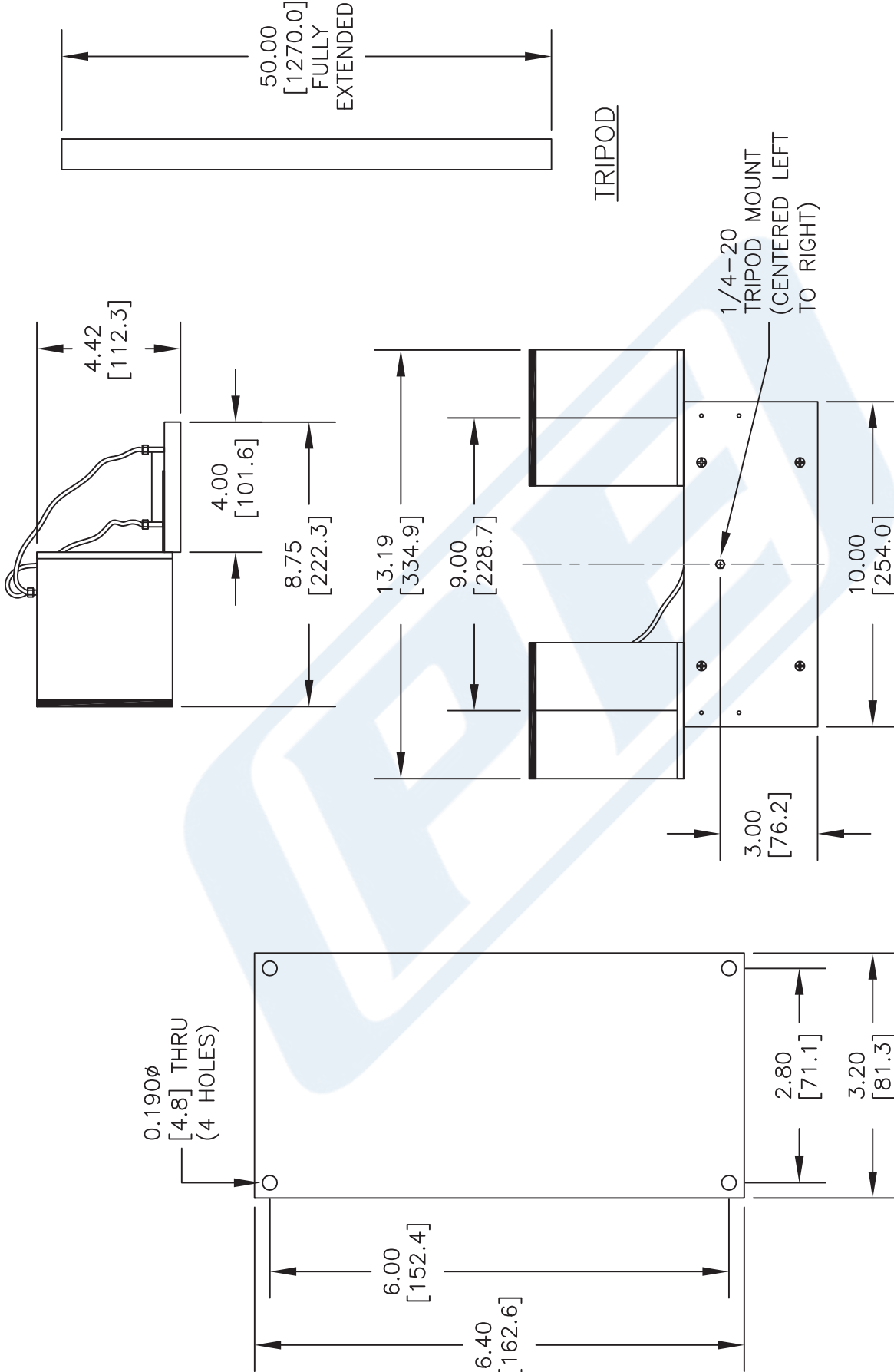
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PEM11002-KIT CAD Drawing

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FULLY ASSEMBLED DIMENSIONS

BOARD DIMENSIONS

DWG TITLE

PEM11002-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 050316

SCALE N/A

SIZE A

2233