



2210A & 2211A QUARTZ FREQUENCY STANDARDS

- 5MHz or 10MHz Frequency Reference
- 100kHz Capability (with MOPS option)
- 100MHz Capability (option)
- Ultra High Stability
- Low Phase Noise
- Alarm Indicator and Output
- Available in 1U (2210A) & 2U (2211A)



ptf 2210A

The **ptf 2210A** Quartz Frequency Standard has been designed to provide a highly stable and spectrally pure frequency reference for applications requiring the ultimate in short term frequency performance.

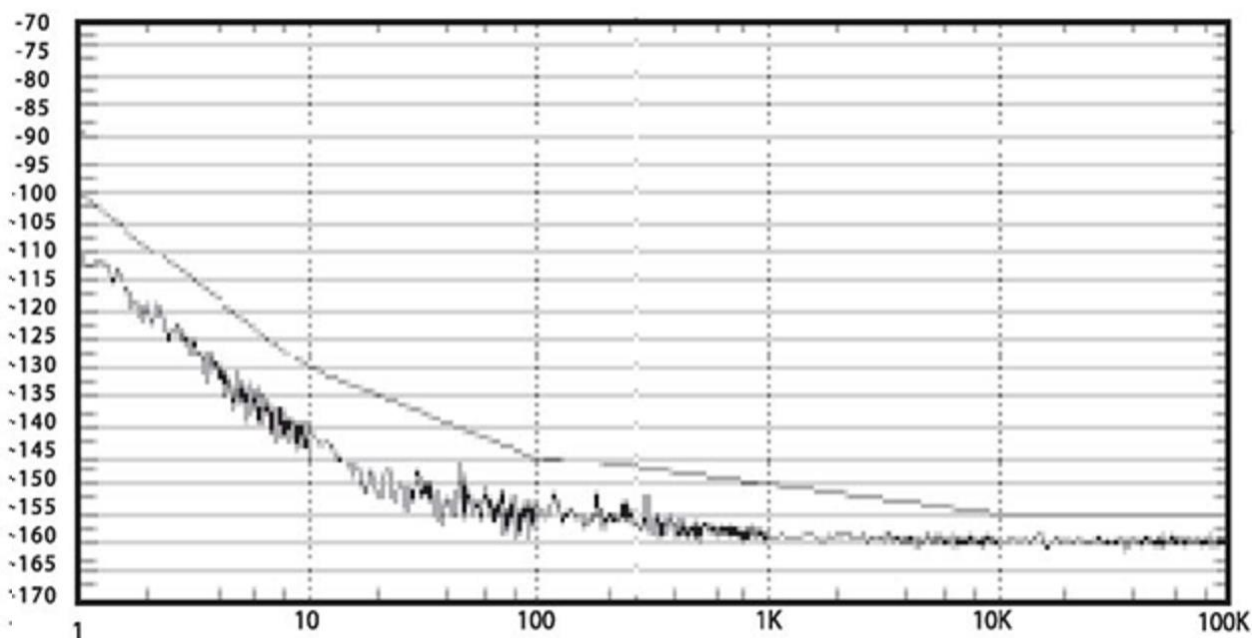
The instrument contains a double oven controlled stress compensated (SC cut) quartz crystal oscillator (OCXO) to give the ultimate in performance.

Ideal for laboratory or system use, the unit provides good stability performance at lower cost and with improved phase noise.

A range of options are available to enhance the functionality of the unit including disciplining from an external reference for improved long term stability, multiple frequency outputs and a DC power supply.

Refer to the Configuration Options table for complete list.

Phase Noise: **ptf 2210A**





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SPECIFICATIONS

ELECTRICAL

Outputs

Frequency	5MHz or 10MHz
RF sine,	+13dBm
Output Amplitude	1V (into 50Ω)
Harmonic Distortion	-40dB
Spurious	<-80dB
Aging	1E-10/day (5MHz)
	3E-8/year

	5E-10/day (10MHz)
	3E-8/year

Short-term Stability	1E-12 (5MHz)
	1E-11 (10MHz)

SSB Phase Noise dBc/Hz

Offset	5MHz	10MHz
1Hz	-110	-95
10Hz	-140	-125
100Hz	-150	-150
1000kHz	-155	-150
10000kHz	-155	-155
100000kHz	-155	-155

ENVIRONMENTAL & PHYSICAL

Temperature Range	-30C to +70C 2E-10
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Dimensions

(HxWxD)	
2210A	1U x 19" x 16"
2211A	2U x 19" x 16"

Configuration Options

Option	Description
PLLL	External RF Input
RF10	4 x RF Outputs (10MHz)
RF100	4 x RF Outputs (100MHz)
DCPS	DC Power Supply