



# 4145B

## Ultra-Clean Phase-Locked Oscillator

### KEY FEATURES

- High Performance: Cleans up the Signal From a Cs Frequency Standard
- Utilizes the Best Quartz Technology: BVA and SC
- Selectable Time Constants: 10, 50, 200 or 400 Seconds to Optimize Performance
- Exceptional Short and Medium-Term Stability (typical):
  - L (1 Hz) = -125 dBc/Hz at 5 MHz
  - L (10 kHz) = -165 dBc/Hz at 10 MHz
  - $\sigma_y = 1.5 \times 10^{-13}$  from 1 to 1000 seconds
- Standard 19" Chassis: Mounts in Standard Hardware Rack

The 4145B Ultra-clean phase-locked oscillator filters the output from a high performance Cs frequency standard and improves both the phase noise and Allan deviation. The 4145B is the best choice when you need improved short and medium-term performance than a Cs provides.

Please contact Symmetricom with any specific requirements.



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## 4145B Specifications

### ELECTRICAL SPECIFICATIONS

- Input voltage: 85 - 264 V AC
- Input frequency: 47-63 Hz
- Input DC voltage: 24 Vdc + 10%
- Power consumption: 50Ω (max)
- Connector: IEC plug
- Stability (Allan Deviation)
 

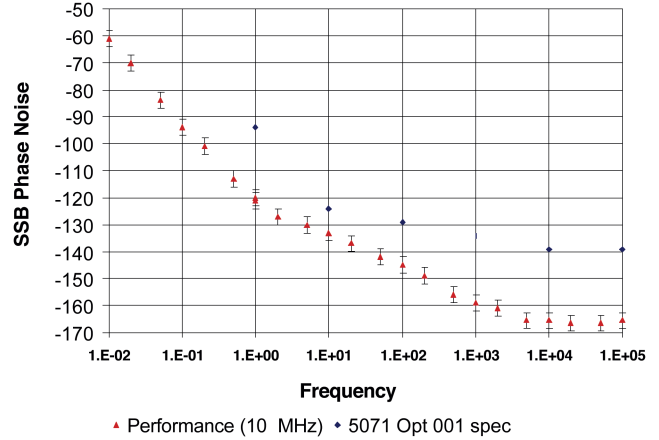
1s	$3 \times 10^{-13}$
100s	$3 \times 10^{-13}$
- Phase noise **L(f) at 10MHz**

1 Hz	-120 dBc/Hz
10 Hz	-130 dBc/Hz
100 Hz	-140 dBc/Hz
1 kHz	-155 dBc/Hz
10 kHz	-160 dBc/Hz
100 kHz	-160 dBc/Hz

### ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

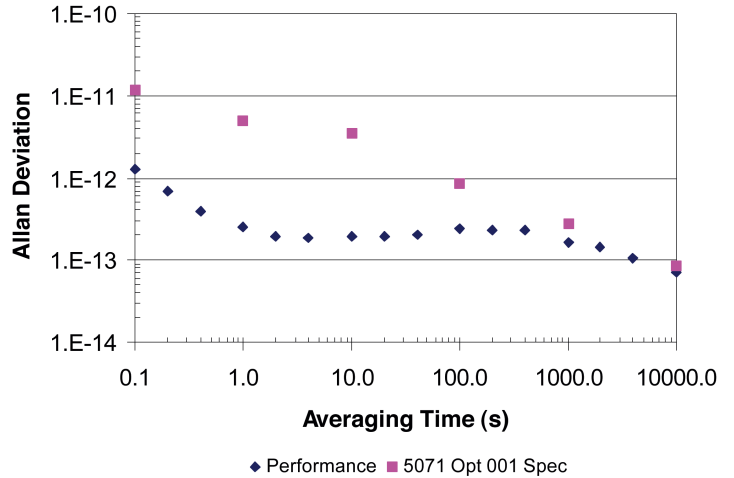
- Weight: 9 Kg (20 lbs)
- Dimensions: 43.2cm x 13.3cm x 55.9 cm (17" x 5.25" x 22")

## 4145B Phase Noise Performance



4145B Phase Noise Performance

## 4145B Short-Term Stability



4145B Short-Term Stability



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