Key Features and Specifications

- Typical Power Requirements (not including receiver):
- +5V at 2.0A
- +15V at 6 mA
- -15V at 3 mA
  - Data Format:
- Signed Magnitude: 31 bits magnitude, 1 sign bit
- 2's Complement: 32 bit parallel binary
- Positive logic
- Least Significant Bit (or one count) equals resolution
- Clipping Format: 8-20 bits
  - Rear Panel Output:
- Data Rate: equal to reference frequency
- Agilent 5517A: 1.5-2.0 MHz
- Agilent 5517B: 1.9-2.4 MHz
- Agilent 5517C: 2.4-3.0 MHz
- Data Age (position or position-error delay time relative to motion of interferometer):
- Agilent 5517A: 2.2-4.2 us typical
- Agilent 5517B: 1.9-3.4 us typical
- Agilent 5517C: 1.6-2.7 us typical
  - Internal Connector Output:
- Data Rate:
- Agilent 5517A: 1.5-2.0 Mhz
- Agilent 5517B: 1.9-2.4 Mhz
- Agilent 5517C: 2.4-3.0 Mhz
- Data Age (position or position-error delay time relative to motion of interferometer):
- Agilent 5517A: 1.7-3.5 us typical
- Agilent 5517B: 1.5-2.8 us typical
- Agilent 5517C: 1.3-2.3 us typical
  - Position Null:
- Range:
- +/-0.002 um (0.1uin) to +/- 10.2 um (410 uin), selectable (High Resolution Interferometer)
- +/-0.005 um (0.2 uin) to +/- 20.5 um (820 uin), selectable (plane mirror optics)
- +/-0.010 um (0.4 uin) to +/- 41 um (1640 uin), selectable (linear optics)
  - Response Time:
- Rear Edge Connector: 1 clock cycle (1/reference frequency)
- Agilent 5517A: 500-667 ns
- Agilent 5517B: 417-526 ns
- Agilent 5517C: 333-420 ns
- Internal Connector: Instantaneous
- curacy: 20-25 degrees C; +/-10%
- Response: Real Double Pole at 10 kHz
- Scaling:
- Linear or Single Beam optics: 0.098V/cm/s (25V/in/s)
- Plane Mirror or Differnetial optics: 0.192V/cm/s (0.5V/in/s)
- High Resolution Interferometer: 0.384V/cm/s (1.0V/in/s)

- High Resolution Interferometer: 0.384V/cm/s (1.0V/in/s)
- Offset:
- 20-25 degrees C: +/- 10mV
- 0-40 degrees C: +/- 20 mV
    - Noise:
- low velocity: <40mV p-p
- high velocity: <10mV p-p
- Field or factory installation offers system flexibility
- Automatic environmental compensation available
- Fast and easy data access for open- and custom closed-loop applications
- High reliability backed by Agilent warranty
- Field or Factory Installed The Agilent 10932B can be ordered as a factory-installed option to the Agilent 5507B electronics system (option 032), or can be ordered separately to customize or expand a system.