



N101VTF™ Voltage to Frequency Converter Module



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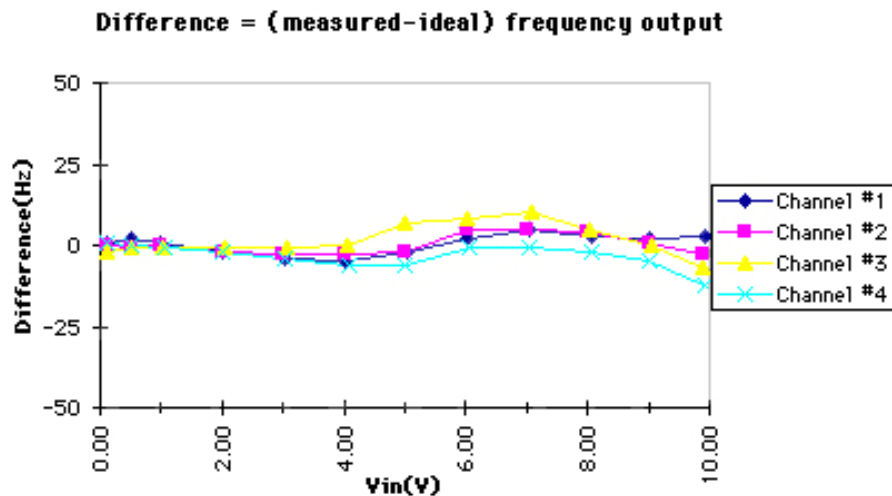
N101VTF™

Voltage to Frequency Converter

The N101VTF is a four channel ultra high linearity (≤ 50 ppm) Voltage-to-Frequency Converter NIM module with onboard calibration capability.

Input: Default 0 to 10 V (or 0 to 5 V internal switch selectable at the input of the VTF).

Output: Two independent but identical outputs per channel.



Graph showing Difference in HZ vs Input voltage.

NOVA R & D Inc.

Features:

- Ultra high linearity, ≤ 50 PPM full scale @ 1 MHz range Voltage-to-Frequency (VTF) converter.
- Measured linearity of some typical channels < 30 Hz in the mid range.
- Four fully decoupled independent channels.
- Undetectable crosstalk between channels.
- Immunity to feedback from large and fast rising voltage swings in different channels.
- Two outputs per channel.
- 0 to 10 volt (or internal switch selectable 0 to 5 Volt) input range.
- Four selectable gains; x1 (accurate calibrated default), x2, x5 & x10 ($\leq 3\%$ accuracy).
- Accepts positive (default) or negative (internal switch selectable) input polarities.
- Accurate 1 MHz clock output from internal 4 MHz common clock circuit.
- On board ultra high stability 0 to 10 V reference voltage output for calibration, (on board pad for 5 V output).
- TTL output frequency range 0 to 1 MHz (2 MHz output is internal jumper selectable).
- All frequency outputs, including the 1 MHz clock, can drive a 50 ohm cable.
- Independent potentiometers for calibrating VTF & instrumentation amplifier modules on each channel.
- Highest rated state of the art instrumentation amplifier and VTF integrated circuits.
- Single width NIM module or stand-alone unit with own power supply.
- 8-Bit Digital Output indicating the front panel gain selection (Can drive standard TTL logic).
- High linearity Frequency-to-Voltage converter NIM module is underdevelopment