# A826PG Resolution

1. A/D Converter Specification
   A/D Converter: ADS7805U (Burn Brown.)
   16-bit resolution
   100K Hz Sampling rate
   +/- 3.0 LSB max INL (Integral linearity error)

Transition Noise:

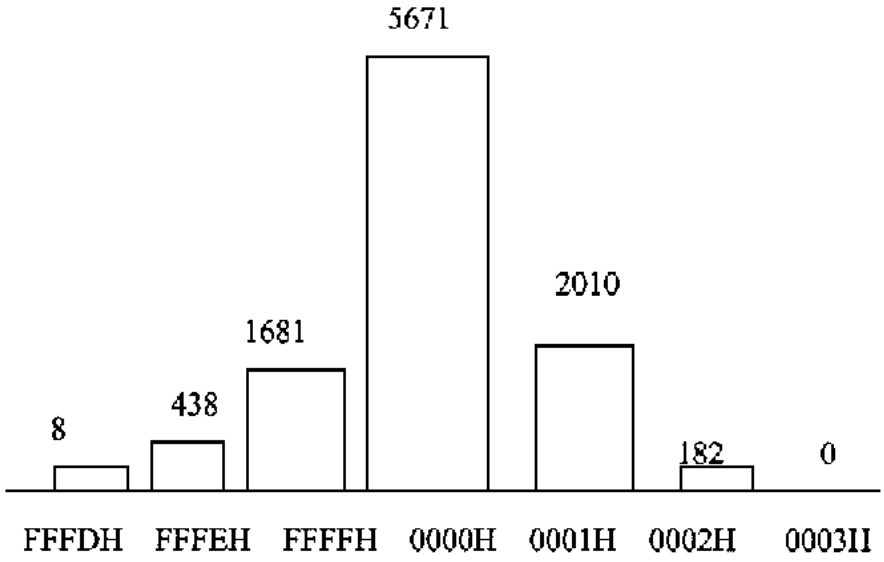


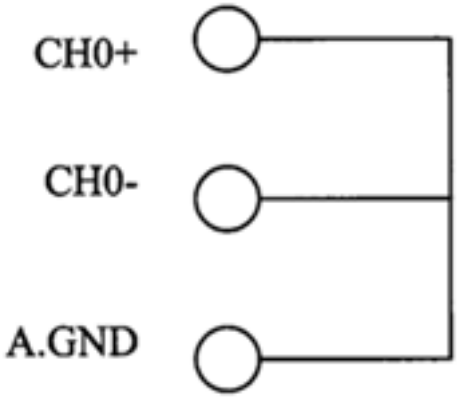

**Figure 1. Histogram of 10,000 Conversions with Input Ground**

A-826PG used the ADS7805U 16-bit A/D converter.
Input range: -10V to +10V, Every LSB resolution is 0.305mV.

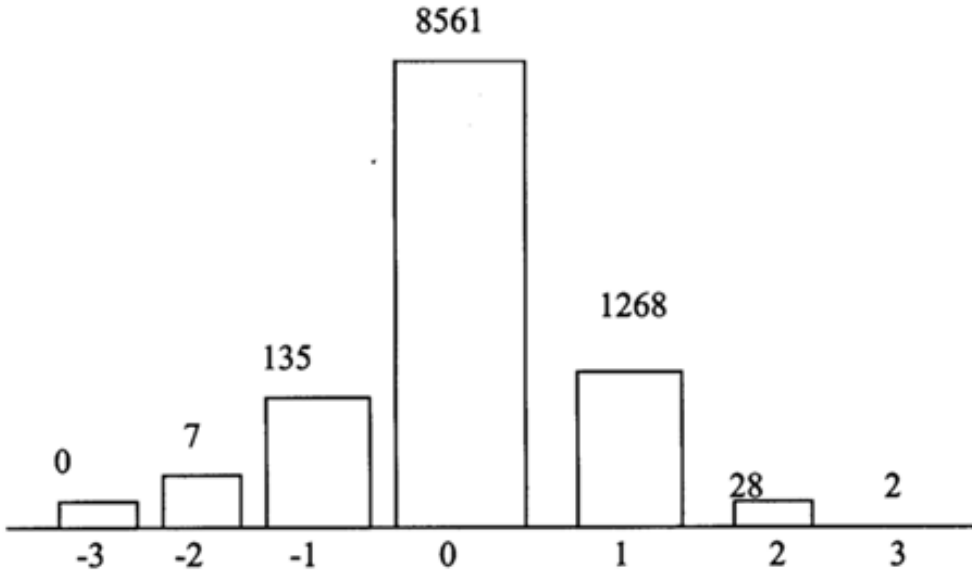
The figure1. is from data sheet of Burn Brown company.

# Experiment 1:

(1). Set A-826PG Differential Mode, Gain=1
Input channel 0: CH0+ connect to CH0- then CH0 connect to A.GND.
(Analog Ground)

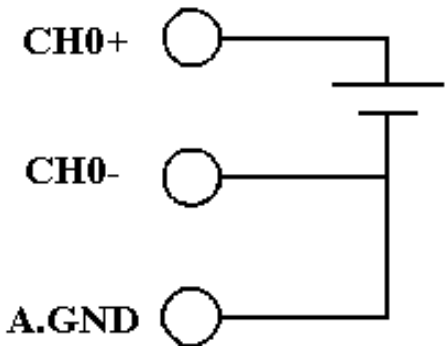



(2). Read Analog Input Channel 0 10,000 times given as follows



# Experiment 2:

(1). Set A-826PG become differential mode, Gain=1
Input channel 0: input voltage signal (We suggest to use battery signal)




(2). Read Analog Input Channel 0 10,000 times given as follows