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Model 105 and Model 106 Counts-to-Volts Converters

These devices are based on Delta-Sigma demodulation and are much more stable than similar products utilizing conventional techniques. They are suited for interfacing radiation counters, or other pulse output devices, to data acquisition systems. They can often serve as upgrades for conventional frequency-to-voltage converters. The frequency input ranges can be customized. The Model 105 is a single-range device, while the Model 106 has a dual input range. Both are positive edge triggered.

Model 105 Specifications

Standard Input Range	0 to 380 KHz (5 Volt logic)
Standard Output Range	1 volt per 200 KHz
Resolution	One count per second when used with a sufficiently quiet high resolution A/D converter
Filter time constant	0.5 seconds.
Linearity	0.001% of full scale, typical
Power requirement	+/-12 to +/-15 volts DC, regulated

Model 106 Specifications

High Input Range	0 to 380 KHz
Low Input Range	0 to 7500 Hz
High Output Range	1 volt per 200 KHz
Low Output Range	1 volt per 1666 Hz (100,000 CPM)
Resolution	one count per second when used with a sufficiently quiet high resolution A/D converter
Filter time constant	jumper selectable, 0.5 or 3 seconds.
Linearity	0.001% of full scale, typical
Power requirement	15 to 28 VDC regulated or unregulated, at 15 MA
Other Features	Optical isolation on input Steel Enclosure with range switch and range indicator LEDS