

## SPECIFICATIONS

**Number of Output Channels: 2**

<b>D.C. Output Characteristics</b>	<p><b>Output Voltage Range:</b> <math>\pm 5</math> V into <math>50 \Omega</math>; <math>\pm 10</math> V into <math>&gt;10 \text{ k}\Omega</math> load.</p> <p><b>Maximum output current:</b> <math>\pm 100</math> mA</p> <p><b>Output impedance:</b> <math>50 \pm .5 \Omega</math></p> <p><b>Minimum amplitude range:</b> <math>&lt;100 \mu\text{V}</math> full-scale into <math>50 \Omega</math></p> <p><b>D.C. Output Accuracy: (at calibrate time):</b> 0.5% FSR into <math>50.00 \Omega</math> for <math>\text{FS} \geq 500 \text{ mV}</math>  1.0% FSR <math>\pm 500 \mu\text{V}</math> into <math>50.0 \Omega</math> for <math>\text{FS} &lt; 500 \text{ mV}</math>. (Accuracy gradually drops from .5% to 1% at 50 mV FS)  0.3% FSR into user supplied load of from <math>49 \Omega</math> to <math>1 \text{ M}\Omega</math> for <math>\text{FSR} \geq 10\%</math> of Max Output Voltage Range.</p> <p><b>Output Temperature Coefficient:</b> <math>&lt;0.01\%</math> of FSR/ <math>^{\circ}\text{C}</math> typical</p> <p><b>Waveform DAC Resolution:</b> 12 bits</p> <p><b>Gain Adjust Resolution:</b> 0.05% Amplitude</p> <p><b>Offset Adjust Resolution:</b> 0.05% FSR</p> <p><b>Waveform DAC Int. Non-Linearity:</b> <math>\pm 0.03\%</math> typ.; <math>\pm 0.05\%</math> max</p> <p><b>Waveform DAC Diff. Non-Linearity:</b> <math>\pm 0.75</math> lsb typ; <math>\pm 1</math> lsb max, monotonic</p> <p><b>Offset Adjust Range:</b> <math>\pm</math> Full Scale Amplitude (wrt midscale of waveform); must be within Output Voltage range.</p>
<b>Dynamic Characteristics:</b>	<p><b>Risetime/Falltime:</b> <math>\leq 8</math> nsec (5.5 nsec typ)</p> <p><b>Overshoot and Ringing:</b> <math>\leq 5\%</math>, typically 2%</p> <p><b>Total Harmonic Distortion:</b> <math>\leq -65</math> dBc, <math>f &lt; 200 \text{ kHz}</math>  (1 V rms into <math>50 \Omega</math>) <math>\leq -55</math> dBc, <math>f &lt; 1 \text{ MHz}</math>  <math>\leq -45</math> dBc, <math>f &lt; 5 \text{ MHz}</math></p> <p><b>Spurious and non-harmonic distortion:</b>  <math>&lt; -65</math> dBc, <math>f \leq 1 \text{ MHz}</math>  <math>&lt; -60</math> dBc, <math>f &gt; 1 \text{ MHz}</math>  excluding the band within  1 kHz of carrier</p> <p><b>Settling Time:</b>  <math>&lt; 20</math> nsec to 1% typical,  50 nsec max.</p> <p><b>Interchannel Crosstalk:</b> <math>\leq 0.05\%</math>, tested with both channels at 10 V amplitude.</p> <p><b>Channel-to-Channel Analog Delay Difference:</b> <math>\leq 3</math> nsec</p>