

## Slotless Brushless PM Motor Achieves High Power Efficiency

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The ThinGap™ TG3600 Series slotless brushless PM motor from G&G Technology incorporates new winding technology that eliminates eddy current and hysteresis losses and achieves very high power efficiency over a wide speed range. A maximum continuous torque of 115 ounce-inches is achieved at 2,400 rpm rated speed point using an input voltage of 24 V DC and 15.6 A to the TG3600 motor from the specified PWM servo amplifier. The thin wall of the stator coil allows a miniature air gap to be used in combination with the high energy Neodymium-Iron-Boron magnets to create a high power density brushless PM motor. With no magnetic hysteresis, low speed cogging is non-existent. Armature inductance measures below 10  $\mu\text{H}$  and line-to-line resistance is 0.31  $\Omega$  at 25°C. The TG3600 series is thermally rated for high performance operation up to 160°C temperature rise plus ambient conditions. **ThinGap**, (805) 477-9741; Fax: (805) 477-9743; [www.thingap.com](http://www.thingap.com).

