



Reduced development time with the Commander Motion Controller

The new Commander Motion Controller (distributed by Dynetics) from NPM, a four-axis hybrid IC, closes the gap between standard controllers and completely new customer-specific controllers to be developed from scratch.

The Commander is reliable, flexible, cost-effective and can be easily scaled from prototype to production - even for difficult applications. The advanced features of the Commander core include linear, arc, circular, helix and tangential interpolation, coordinated motion and continuous buffered motion, thanks to its 100 buffer registers. The user can also choose between trapezoidal or S-curve acceleration/deceleration and absolute or incremental posi-

tioning. Changes can also be made on the fly, with either the velocity or target position being shifted as desired during operation.



Commander control module for complex motion sequences



NPM Commander Controller and Universal Arcus Driver Module

The ARCUS TITAN-SVX-CR (distributed by Dynetics) is a hybrid IC version of the TITAN servo motor technology in a compact package with innovative motion analytics – ideal for customized OEM applications. Together with NPM's Commander Hybrid Module, compact motion control solutions up to four axes are possible.

The controller can be used in a wide range of applications, for example for two-phase stepper motors, three-phase BLDC motors (rotating and linear) and voice coil motors. The integrated ARCUS software wizard automatically detects the motor parameters without external sensors and thus enables easy installation.

The TITAN Servo Motor Controller Core has integrated motor drive circuitry including the power FETs and all software features available in the standard

TITAN Servo product line. All that's needed for a complete controller are the power inputs for the FETs, 5 V CPU power input, and communication and digital IO interface circuitry with application specific connectors. In combination with NPM's Commander Hybrid Module, a space-saving 4-axis controller can be realized. The ARCUS TITAN-SVX-CR can be operated in Controller or Pulse mode and has Open Loop Hold and Dynamic Gain, simplified Gain Setting and Advanced Plotting and Probing.



Compact housing, integrated 2ndSight-Edge predictive learning algorithm for motion system analysis and monitoring

2ndSight – integrated motion analytics solution

These TITAN servo motor controllers can learn, analyze and monitor the state and performance of a motion system without external sensors thanks to 2ndSight-Edge Predictive Learning Algorithm. "2ndSight Edge Intelligence" is a patent-pending motion ana-

lytics solution that addresses many challenges in automation and manufacturing. It is an innovative approach to applying multidimensional machine learning, analytical physics, statistics and regression techniques to quantify and determine the overall state of a motion system. Key elements of the solution include multidimensional modeling and monitoring, friction coefficient calculation, velocity and current vibration analysis and stress, impact tracking and power usage tracking. 2ndSight is based on a data-driven intelligent real-time algorithm optimized for efficiency and response time. The compact data sets of 2ndSight can be easily shared via network and cloud, which would be much more costly for raw motion data. ■ ds



Find out more now!

- Overview ARCUS TITAN-SVX-CR
- Video "Dynetics presents the NEW nippon pulse Commander core and the ARCUS TITAN-SVX-CR"
- Commander Controller Module
- Request info