DigiFlex®
Performance™

Servo Drive Solutions

DPP series
AC or DC supplied panel mount servo drives

DZP series
DC supplied high power density embedded servo drives

ETHERNET POWERLINK certified product
Panel Mount Drives

DPP drives are enclosed with a cover and offer various mounting options.

<table>
<thead>
<tr>
<th>AC or DC Powered Models</th>
<th>DPPANIU-015S400</th>
<th>DPPANIU-040A400</th>
<th>DPPANIU-C060A400</th>
<th>DPPANIU-C100A400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply (VAC)</td>
<td>100-240*</td>
<td>100-240</td>
<td>200-240</td>
<td>200-240</td>
</tr>
<tr>
<td>Supply (VDC)</td>
<td>-</td>
<td>127-373</td>
<td>255-373</td>
<td>255-373</td>
</tr>
<tr>
<td>Peak Current (A)</td>
<td>15</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>Cont. Current (A)</td>
<td>7.5</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>177 x 123 x 44</td>
<td>178 x 134 x 47</td>
<td>257 x 183 x 84</td>
<td>257 x 183 x 135</td>
</tr>
</tbody>
</table>

*Single Phase AC Only

<table>
<thead>
<tr>
<th>DC only Powered Model</th>
<th>DPPANIU-020B080</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply (VDC)</td>
<td>20-80</td>
</tr>
<tr>
<td>Peak Current (A)</td>
<td>20</td>
</tr>
<tr>
<td>Cont. Current (A)</td>
<td>10</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>167 x 90 x 36</td>
</tr>
</tbody>
</table>

Z-Drives Plug-In Integration

DZP drives are packaged in a lightweight and compact form factor designed to be embedded directly into a PCB - no wires required! Inverted baseplate mounting also allows for direct wired connector access. A common footprint is used for the different power modules in the series to simplify prototyping.

<table>
<thead>
<tr>
<th>DC Powered Models</th>
<th>DZPANTU-020B080</th>
<th>DZPANTU-040B080</th>
<th>DZPANTU-020B200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply (VDC)</td>
<td>20-80</td>
<td>20-80</td>
<td>40-175</td>
</tr>
<tr>
<td>Peak Current (A)</td>
<td>20</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Cont. Current (A)</td>
<td>10</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>90 x 64 x 20</td>
<td>90 x 64 x 20</td>
<td>90 x 64 x 20</td>
</tr>
</tbody>
</table>

Motor Types

- Three Phase (Brushless)
  - Servo - BLDC, PMAC
  - AC Induction (Closed Loop Vector)
  - Closed Loop Stepper
- Single Phase
  - Brushed
  - Voice Coil
  - Inductive Load

Universal Feedback

Primary (firmware-selectable)
- Absolute Encoder
- EnDat®
- Hiperface®
- BiSS® C-Mode
- 1Vp-p Sin/Cos Encoder

Auxiliary
- Aux. Incremental Encoder
- Hall Sensors
- ±10VDC Position
- Tachometer
- ±10VDC
- ±60VDC

ETHERNET POWERLINK certified product

ADVANCED Motion Controls offers mounting cards to simplify the connections between DZP drives and external system hardware (motors, feedback devices, controllers). These mounting cards are ideal for the prototyping and development stages as well as implementation into the final system design. Reference documentation and design notes are also available for users to design their own interface cards.
The Ethernet POWERLINK family of DigiFlex® Performance™ (DP) digital servo drives provide a wide range of options for servo system solutions. DPP/DZP drives deliver peak power output from 1.5 to 27.4kW, and support an array of feedback and motor options, offering a versatile blend of cutting edge technology and proven results.

- Real-time oscilloscope for performance tuning
- Dual loop feedback and control - increases stability and accuracy
- Standard models in both Panel Mount and PCB Mount (Z-Drives)
- Employs Space Vector Modulation, resulting in higher bus voltage utilization and reduced heat dissipation
- 2 dedicated STO (Safe Torque Off) inputs
- EN 62061 / IEC 61508 SIL 3
- EN ISO 13849-1 Category 4 / PL e
- EPSG Tested Compliance Cert. No. 10500138
- Compliant with B&R’s Automation Studio MAPP, Function Block, Camming, Etc.
- AC and DC powered models
- Universal servo motor capability by means of automatic commutation adjustment
- Full tuning control of Position, Velocity, and Torque Loops
- Status panel for drive and system diagnostics
- I/O configuration for over 60 events and signals

**Network Communication**

Ethernet POWERLINK is an open, real-time industrial Ethernet solution designed to give users a single, consistent, and integrated means for handling all communication tasks in modern automation. A POWERLINK network integrates all automation components such as PLCs, sensors, I/O modules, motion controllers, safety controls, and HMI systems.

- Integrates features and advantages from Ethernet, CANopen®, and hard real-time capabilities
- Guaranteed bandwidth for troubleshooting purposes ensures the transmission of dedicated diagnostics data without disturbing real-time behavior
- Cycle times down to 400μs, system synchronization sub-μs
- 240 nodes in a single network
- Collision-free network messages
- No topology restrictions

**DriveWare® 7**

DriveWare® 7 is the powerful servo drive tuning and configuration software used to commission and troubleshoot all ADVANCED Motion Controls DigiFlex® Performance™ digital servo drives. All drive limits, control loops (current, velocity, and position), and event handling can be configured in DriveWare. Notable features include a fully functional multi-channel oscilloscope, function generator and user friendly layout and interface.
About ADVANCED Motion Controls

ADVANCED Motion Controls has earned a reputation for being a flexible and affordable manufacturer of quality high performance and high power density servo drives. Camarillo California is home to our state-of-the-art 80,000 square foot facility that integrates Engineering, Manufacturing, Testing and Support in a single location. Using our off-the-shelf product line as a starting point our customers know they can specify modifications and custom solutions to solve their specific problems. This frees our customers to design systems without the constraints imposed by other servo drive manufacturers.

Any Motor, Any Controller, Any Feedback!

Our core business is servo drives. We offer hundreds of off-the-shelf models, and if we don’t have what you need we can work with you to create a custom solution that does. Our servo drives can be found all over the world in the highest performance applications, the harshest environments as well as working reliably in day to day operations throughout the world.

25+ Years of Excellence

Over 25 years of servo drive manufacturing, with over 2.5 million servo axes built and shipped worldwide!

Whether by implementing innovative design techniques throughout our line of off-the-shelf products, or by directly solving a specific customer’s application with a brand-new custom product, ADVANCED Motion Controls has the drive expertise to take on your servo system challenge.

Applications and Industries

- Assembly Automation and General Factory Machinery
- Communications Control
- Electric Mobility and Mobile Robotics
- Entertainment
- Homeland Security and Defense
- Inspection, Testing and Rapid Prototyping
- Lab Automation
- Machine Tool and Metalworking
- Material Handling and Conveyed Systems
- Medical
- Packaging
- Power Generation and Alternative Energy Sources
- Robotics (fixed)
- Semiconductor
- Simulators
- ...and many more!

ADVANCED MOTION CONTROLS

Everything’s possible.

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