



SmartPak / PulsePak

Motion Controller Kits

Get your application up and running fast with Nippon Pulse's new pre-packaged solutions!

Introducing the **SmartPak** and **PulsePak** motion controller kits, each of which contains a hybrid stepper motor with integral encoder, a servo controller (either a programmable controller-driver or a pulse & direction driver) and a cable kit to connect everything together.

Both kits feature:

- Nippon Pulse hybrid stepper motor with integral 1000 or 2500 cpr encoder
- Motor available in NEMA sizes 8 through 34
- 24 inches of cable with connectors
- Real-time servo / closed-loop control
- Easy BASIC programming controller
- Powerful built-in multi-thread processor
- Wizard for motion system tuning/autotuning
- Auto-force control programming
- USB/RS-485 Serial communication
- ASCII, MODBUS and RTU protocols supported
- Opto-isolated I/O
- Real-time edge analytics (option)
- Motor power 24 to 48 VDC
- Compatible with: 2 phase stepper, 3 phase brushless servo, 3 phase linear servo, DC brushed, voice coil motors

SmartPak *Features*

- Nexus all-in-one servo driver and controller
- Motor and actuator tuning
- Standalone Control Mode A-SCRIPT programs
- Networked multi-axis control mode (RS-485)
- 8 Opto Input (+Limit, -Limit, Home), 3 Opto Out
- 3 multi-thread program storage
- STO (safe torque off) safety feature
- 2ndSight data port for Cloud Analytics

The PulsePak and SmartPak kits are ideal for use in a wide variety of automation applications including:

- Factory Automation
- Lab Automation
- Semiconductor
- Packaging and Labeling Machines
- Food Processing

PulsePak *Features*

- Nexus Pulse and Direction driver
- 3 Opto In (+Limit, -Limit, Home), 2 Opto Out



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Part Numbering Example

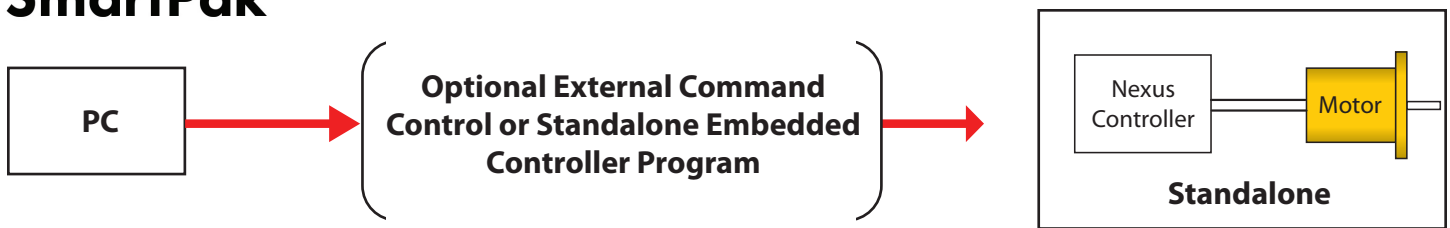
Kit Model Number: **MCK-17 D2 E1-NX-SCX**

| Series: | NEMA Size: | Motor Winding: | Stack Length: | Encoder: | Controller Kit: |
|------------|------------------|----------------|-------------------|------------------------------------|------------------------------------|
| MCK | 8 - 20mm | E | 1 - Single | 1 - 1000 cpr | NX-SCX = Nexus SmartPak |
| | 11 - 28mm | D | 2 - Double | | |
| | 14 - 35mm | A | 3 - Triple | NX-SVX = Nexus PulsePak | |
| | 17 - 42mm | F | | | |
| | 23 - 57mm | N | | | |
| | 24 - 60mm | R | | | |
| | 34 - 86mm | H | | | |
| | J | | | | |

Therefore, this part number indicates a SmartPak kit with NEMA 17 motor with double stack (PJE42T-40D14) and 1000 cpr encoder.

Visualizations

SmartPak



PulsePak



Purchasing your motion controller kit is easy – order a single part number, and all necessary components will be included in a single box. Bulk shipments also available with reduced packaging. Contact an applications engineer today!

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