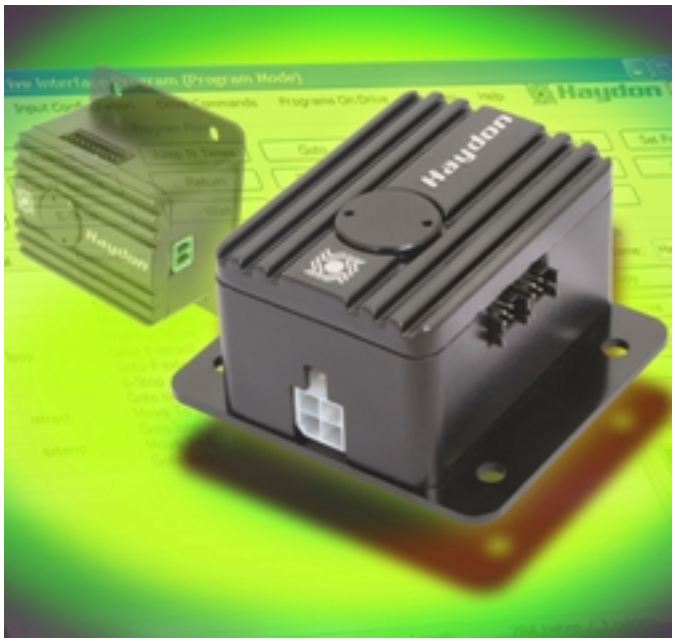
Stepper Motor Drive Module Offers RS-485 Communication Protocol



The IDEA stepper motor drive platform now has the capability of communication using an RS-485 data protocol. The RS-485 protocol overcomes the limitations of other drive communication methods making the RS-485 IDEA drive module perfect for industrial applications.

The main advantage of using the RS-485 protocol, especially for industrial equipment such as stepper drives, industrial motor drives, and servo systems, is the ability for long data transmissions while exhibiting excellent immunity to electrical noise. The RS-485 protocol utilizes “differential” signal lines for limiting common mode noise coupling and twisted pair cabling for cancelling out induced noise current. This allows IDEA devices to communicate over a network of 1000ft without the need for termination resistors. The system architecture also allows up to 256 addressable device nodes. An industrial controller can send commands to all the drives at once, or each drive can be controlled separately when assigned a unique identifier, a number between 0 and 255. To download the entire IDEA Drive Communications Guide, visit www.idea-drive.com [1].

The IDEA platform is a RoHS compliant, small footprint, electronic drive and fully programmable control unit with easy-to-use graphic user interface programming. Hardware features of the IDEA Drive platform include programmable current control, a single supply voltage of 12 to 48 VDC, 2.6Arms (3.68Apeak) max rated current per phase, and 8 opto-isolated general purpose I/O. The inputs are rated for 5 to 24 VDC, 4mA max per input. The outputs are open collector, 5 to 24 VDC, 200mA maximum per output.

For more product information and CAD links, visit www.HaydonKerk.com [2] or

speak with an engineer to discuss a specific application by contacting Haydon Kerk at 203-756-7441.

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[1] http://www.idea-drive.com/
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