

# Digital Interfaces and Function Unit

For the Modular E-500 Motion Controller System



## E-518

- Low-noise 20-bit D/A and A/D converter
- 25 kHz sample rate
- TCP/IP, USB as well as RS-232 interface
- Wave generator with programmable trigger inputs and outputs
- 3 channels
- Plug-in module for E-500 piezo system

### Interface and function module for piezo-based positioning systems

Interface module for digital control of the closed-loop analog E-500 motion control system. Availability of digital functions such as wave generator or data recorder.

#### Interfaces

Commanding via TCP/IP, USB, and RS-232 interfaces. Digital inputs and outputs for automation.

#### Extensive functions, software support

Powerful macro command language. Nonvolatile macro storage, e.g., for stand-alone operation with autostart macro. Data recorder. Wave generator. Extensive software support, e.g., for NI LabVIEW, C, C++, MATLAB, Python. PIMikroMove user software.

### Specifications

	E-518.I3
Function	Digital interface module for the E-500 system (E-500, E-470, E-481, E-482)
Channels	3
Supported functions	Wave generator. Data recorder. Macro programming.
Processor	DSP 376 MHz
Sampling rate, sensor	200 kHz
Servo control rate	25 kHz
Sensor resolution	ADC: 20 bits, oversampling + filter
Voltage resolution	DAC: 20 bits, oversampling + filter, 16 bit @ 1 MHz

Interfaces and operation	E-518.I3
Communication interfaces	TCP/IP, USB, RS-232
I/O lines	3 digital inputs, 3 digital outputs 3.3 V, MDR14 connector
Command set	PI General Command Set (GCS)
User software	PIMikroMove
Application programming interfaces	API for C / C++ / C# / VB.NET / MATLAB / Python, drivers for NI LabVIEW

Miscellaneous	E-518.I3
Operating voltage	Via the power supply of the E-500 system
Operating temperature range	5 to 50 °C
Dimensions	14HP / 3RU
Mass	0.26 kg

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## Ordering Information

### E-518.I3

Interface module, 3 channels, TCP/IP, USB, and RS-232 interfaces