

EMX-7500 SERIES

PXIe DIGITAL INPUT/OUTPUT



The AMETEK VTI Instruments EMX-7500 Series is a family of high-performance PXIe modules consisting of multiple I/O configurations and logic levels. Dedicated input or output cards are available for high channel count applications while other cards provide ultimate flexibility with eight, 8-bit ports (64 channels) that can be configured as an input or output under programmatic control.

Models capable of sinking 300 mA include built-in clamping diodes, making these modules ideal for driving and sensing external devices such as relays, while all clamping diodes and open collector channels can be pulled up internally, rather than on a per channel basis, simplifying overall system cabling. Isolated models are also available for more demanding applications.

FEATURES

- High Current
 - 300 mA Sink
- High Density
 - 64 Channels / Card
- Isolation
 - 1000 V
- Multiple Digital Logic Levels
 - LV TTL
 - TTL
 - 60 V Max, User Defined
- Flexible Configurations
 - Dedicated Input
 - Dedicated Output
 - Eight, 8-Bit Ports
- Flexible Software
 - Embedded Soft Front Panel
 - Common IVI Software Drivers

EMX-7500 SERIES PXIe Digital Input/Output

Specifications

| | | | |
|----------|----------------------|------------------------------------|-------------------------------------|
| EMX-7510 | Digital Input/Output | Channels | 64 (Eight 8-Bit Ports) |
| | | V IN (high) | > 40% of Vclamp |
| | | V IN (low) | < 14% of Vclamp |
| | | V IN (max) | 60 V |
| | | V OUT (high) | > 2 V to 60 V |
| | | V OUT (low) | < 1.5 V @ 300 mA max. (sink) |
| | | Connector Type | ERNI 160-Pin |
| | Voltage Range | Internal Voltage Source (Vclamp) | 3.3 V, 5.0 V, 12.0 V and 24.0 V |
| | | User Voltage ¹ (Vclamp) | > 2 V up to 60 V |
| EMX-7511 | Digital Input/Output | Channels | 64 (Eight 8-Bit Ports) |
| | | Logical Level | Standard TTL @ 24 mA sink/source |
| | | Connector Type | ERNI 160-Pin |
| EMX-7512 | Digital Input/Output | Channels | 64 (Eight 8-Bit Ports) |
| | | Logical Level | Standard LVTTTL @ 24 mA sink/source |
| | | Connector Type | ERNI 160-Pin |
| EMX-7513 | Digital Input | Channels | 32 |
| | | Logical High | 2.8 V to 60 V |
| | | Logical Low | < 2 V |
| | | Isolation to Computer GND | 1000 V |
| | Digital Output | Channels | 32 |
| | | Maximum Switching Voltage | 60 V (AC/DC) |
| | | Maximum Switching Current | 100 mA |
| | | Potential Free | Yes |
| | | Isolation to Computer GND | 1000 V |
| | | Connector Type | ERNI 160-Pin |
| EMX-7514 | Digital Output | Channels | 64 |
| | | Maximum Switching Voltage | 60 V (AC/DC) |
| | | Maximum Switching Current | 100 mA |
| | | Potential Free | Yes |
| | | Isolation to Computer GND | 1000 V |
| | | Connector Type | ERNI 160-Pin |
| EMX-7515 | Digital Input | Channels | 64 |
| | | Logical High | 2.8 V to 60 V |
| | | Logical Low | < 2 V |
| | | Isolation to Computer GND | 1000 V |
| | | Connector Type | ERNI 160-Pin |
| EMX-7519 | Digital Output | Channels | 64 (Eight 8-Bit Ports) |
| | | V OUT (high) | > 2 V to 60 V |
| | | V OUT (low) | < 1.5 V @ 300 mA |
| | | Connector Type | ERNI 160-Pin |
| | Voltage Range | Internal Voltage Source (Vclamp) | 3.3 V, 5.0 V, 12.0 V and 24.0 V |
| | | User Voltage ¹ (Vclamp) | > 2 V up to 60 V |

¹ User voltage can be applied through the DIO Connection.

Ordering Information

| Model | Configuration |
|--------------|---|
| EMX-7510 | 64-CH DIO, Source/Sink, 60 V max Static I/O |
| EMX-7511 | 64-CH, DIO TTL, Static I/O |
| EMX-7512 | 64-CH, DIO LV TTL, Static I/O |
| EMX-7513 | 32DI/DO, Isolated Switch card, 60 V |
| EMX-7514 | 64DO, Isolated Switch card, 60 V |
| EMX-7515 | 64 DI, 60 V max, Isolated Static I/O |
| EMX-7519 | 64-CH DO, Source/Sink, 60 V max Static |
| 70-0409-160R | Strain relief bracket kit (without connector) |
| 27-0088-160 | Mating connector housing 160 pin (without crimp pins) |
| 52-0109-000R | Crimp Pins (one bag contains 100 nos crimp pins) |
| 46-0010-000 | Crimp tool (DIN) |
| 46-0011-000 | Extraction tool (DIN) |
| 70-0367-205R | Terminal Block |

AMETEK[®]

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