### Linear Motor Gantry LMT

**Order Codes**

<table>
<thead>
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<th>Code</th>
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**Order Codes**

- **Encoder Type**
  - Nikon
  - BiSS
  - Resolver

- **Peak current**
  - 90A
  - 36A
  - 18A
  - 9A

- **Heat sink type**
  - With external heat sink
  - Without external heat sink

- **Voltage range**
  - 3 phase 230VAC/380VAC
  - 1/3 phase 230VAC

**Order Codes**

- **Product**
  - D1-N

**Order Codes**

- **Interface**
  - Standard / without communication interface
  - EtherCAT (mega-ulink)
  - EtherCAT (CoE)

**Order Codes**

- **STO (Safe Torque Off) function**

**Order Codes**

- **Complete Tool Set**

**Order Codes**

- **Reserved**

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**Excellent Performance**

The D1-N drive achieves high positioning performance to compliment the motion control technology of the semiconductor industry. The D1-N drive achieves very good following characteristics and effective shorter cycle positioning time.

**Simple Operation**

User-friendly interface provides very simple settings. All standard types of motors and encoders are built-in.

**Easy Integration**

The D1-N drive provides a perfect solution. According to customer's requirements we can integrate all that are required for users' specifications.

**Complete Tool Set**

There are commissioning interfaces for speed and acceleration protection settings, gear settings, and an USB test. Plus the D1-N drive has a complete filter, frequency analysis, Bode plot, Lissajous figures and other functions which provide a complete drive control program.

**Safety Function: Safe Torque Off**

The D1-N drive achieves very good following characteristics and effectively shortens the positioning time.

**Positioning Measurement System**

The D1-N drive is suitable for the high precision positioning control in the semiconductor industry. The D1-N drive achieves very good following characteristics and effectively shortens the positioning time.

**Servo Drive**

The D1-N series delivers the high performance overview with EtherCAT interface. EtherCAT Conformance Test certified by an official EtherCAT Test Center.

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**Functional Safety Certificated**

STO (Safe Torque Off) function is compliant with the international standards.

**IEC 61508-1, IEC61508-2, ISO 13849-1 and ISO 13849-2 Functional Safety Certificated.**

**Setup can be completed with just one-click.**

**Human-machine interface provides very simple settings. All standard types of motors and encoders are built-in.**

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**Service**

Through HIWIN’s complete global presence, we can provide immediate technical services at any time.

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**Functional Safety Certificated**

STO (Safe Torque Off) function is compliant with the international standards.
**Excellent Performance**

**Excellent high speed response**
With the help of semiconductor high-end motion control algorithms and advanced common gain concept, the high-speed response is achieved, thereby satisfying all of the motion control needs.

**Electronic gear ratio and Encoder Emulator**
The D1N drive offers the electronic gear function which helps the user to adjust the resolution of the host controller’s command pulses. The D1N drive can also set the resolution of the emulated encoder which is the output to the host controller. These functions solve the compatibility problems between the encoder and the host controller’s resolutions.

**High acceleration responses**
Using advanced vector control technology, the performance has been optimized to the highest level. To change AC servo motor speed from -3000 to +3000 rpm, it takes as low as 0.006 second.

**Built-in accuracy improvement features**
The D1N drive includes features to improve total positioning accuracy of the mechanical system. The table size can be up to 16,000 points. It is implemented in all control modes to optimize system behavior.

**Vibration Suppression Feature**
The D1N drive can remove the vibration frequency that occurs during movement. It reduces vibrations caused by system structure and improve the machine’s production efficiency.

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**Simple Operation**

**Simple setup**

**Easy operation**
Parameters are categorized according to features, only necessary ones are shown at the right time. No confusing parameter list.

**LCD display**
Without PC and user’s interaction, it is possible to complete basic settings. The LCD display shows the necessary error or warning information and statuses.

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**Wiring Example**

**Regeneration**

**Electrical Breaker 3CV150W**

**EtherCAT Communication**

**Connection to PC**

**Display panel**

**Motor temperature detection**

**Safety Function**

**DC 24V for Brake**

**Motor power end**

**Digital Encoder/EnDat**

**Analog Encoder**

**Resolver**

**D1N-SNN02B**

**D1N-SNN01B**

**D1N-SNN03B**

**D1N-SNN04A**

**D1N-SNN05A**

**D1N-SNN06A**

**D1N-SNN07C**

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**Excellent Performance**

**Auto phase center**

**Tuning completed**

**HIWIN Motors**

**AC servo**

**Linear**

**LMC**

**LMF**

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