DYNAMIXEL MX-106T

**Cautions

- MX-106T supports TTL communication.

- Recommended voltage of MX-106 is different with that of former EX-106+

  (Operating Voltage : 10~14.8V (Recommended Voltage 12V)

** DESCRIPTION

- DYNAMIXEL is a robot exclusive smart actuator with fully integrated DC Motor + Reduction Gearhead + Controller + Driver + Network in one DC servo module.
- MX series is a new concept of DYNAMIXEL with advanced functions like precise control, PID control, 360 degree of position control and high speed communication.

** CHARACTERISTIC

- Advanced durability, degree of precision, and wider control zone were achieved thanks to newly applied **CONTACTLESS ABSOLUTE ENCODER**
- **360¡Æ POSITION CONTROL** without dead zone
- **4,096 PRECISE RESOLUTION by 0.088¡Æ**
- **SPEED CONTROL at ENDLESS TURN MODE**
- Reliability and accuracy were advanced in the position control through **PID CONTROL**
- High baud rate up to **3Mbps**
- **TTL LEVEL COMMUNICATION**
- **Torque control via current sensing**
- **Supports dual mode for master/slave method**
- **Uses aluminum case**

The assembly structure of the MX-106 and EX-106 are the same but there some modifications to the case.

MX-106 External Improvements

Reinforced wheel gear bearing

Fixed nuts

** INCLUDES

Description		Qty
DYNAMIXEL	MX-106T	1
HORN	HN05-N101 (MX Exclusive)	1
WASHER	Thrust Washer	1
CABLE	4P Cable 200mm	1
BOLT/NUT	Wrench Bolt M2.5*4	16pcs
	Wrench Bolt M3*8	1pcs
	Nut M2.5	18pcs

** H/W SPECS

Product Name	MX-106T		
Weight	153g		
Dimension	40.2mm x 65.1mm x 46mm		
Gear Ratio	225 : 1		
Operation Voltage (V)	10	12	14.8
Stall Torque (N.m)	**8.0**	**8.4**	**10.0**
Stall Current (A)	4.8	5.2	6.3
No Load Speed (RPM)	**41**	**45**	**55**
Motor	**Maxon Motor**		
Minimum Control Angle	**About 0.088¡Æ x 4,096**		
Operating Range	Actuator Mode : 360¡Æ Wheel Mode : Endless turn (Position Control)		
Operating Voltage	**10~14.8V (Recommended voltage : 12V)**		
Operating Temperature	-5¡ÆC ~ 80¡ÆC		
Command Signal	Digital Packet		
Protocol	Half duplex Asynchronous Serial Communication (8bit,1stop, No Parity)		
Link (physical)	**TTL Multi Drop Bus** (daisy chain type connector)		
ID	254 ID (0~253)		
Baud Rate	8000bps ~ **3Mbps**		
Feedback Functions	Position, Temperature, Load, Input Voltage, **Current,** etc.		
Material	Case : Engineering Plastic Gear : Full Metal		
Position Sensor	**Contactless absolute encoder**		
Default	**ID #1 – 57600bps**		

** After purchase, please change ID and baud rate according to your use.

** COMPATIBLE PRODUCTS

- Controller : CM-5, CM-510, CM-530, CM-700

- Interface(I/F) : USB2Dynamixel (TTL)

- NOTICE : Not compatible with the EX-106 horn. (HN05-N101 Set / T101 Set)

** CONTROLLING ENVIRONMENT

- Software for Dynamixel control : ROBOPLUS - [Download](#)

- C/C++, C#, Labview, MATLAB, Visual Basic et. : Library – [Download](#)

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