

DYNAMIXEL MX-28T

**Caution

- MX-28T supports TTL communication. (MX-28 has changed to MX-28T)
- Recommended voltage of MX-28 is different with that of former RX-28.
(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° POSITION CONTROL](#) without dead zone
- [4,096 PRECISE RESOLUTION](#) by 0.088°
- [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](#)

** INCLUDES

Description		Qty
DYNAMIXEL	MX-28T	1
HORN	HN07-N101	1
WASHER	Thrust Washer	1
CABLE	3P Cable 200mm	1
BOLT/NUT	Wrench Bolt M2.5*6	16pcs
	Wrench Bolt M2.5*8	1
	Wrench Bolt M2*3	10pcs
	Nut M2.5	18pcs

**** SPECIFICATIONS**

Product name	DYNAMIXEL MX-28T		
Weight	72g		
Dimension	35.6mm x 50.6mm x 35.5mm		
Gear Ratio	193 : 1		
Operation Voltage (V)	10	12	14.8
Stall Torque (N.m)	2.3	2.5	3.1
Stall Current (A)	1.3	1.4	1.7
No Load Speed (RPM)	50	55	67
Motor	Maxon Motor		
Minimum Control Angle	About 0.088;Æ x 4,096		
Operating Range	Actuator Mode : 360;Æ Wheel Mode : Endless turn		
Operating Voltage	10~14.8V (Recommended voltage : 12V)		
Operating Temperature	-5;ÆC ~ 80;ÆC		
Command Signal	Digital Packet		
Protocol	Half duplex Asynchronous Serial Communication (8 bit, 1 stop, 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, 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-2+, CM-700
- Interface(I/F) : USB2Dynamixel (TTL)
- OLD Horn : RX-28 HN07-N1 Set (Horn RX-28), RX-28 HN07-T1 Set (Horn 28T Set),
RX-28 HN07-I1 Set (Bearing Set RX-28)
- OLD Frame : RX-28 FR07-H1 Set (OF-RX28H Set), RX-28 FR07-S1 Set (OF-RX28S),
RX-28 FR07-B1 Set (OF-RX28B)
- NEW Horn : RX-24F/RX-28 HN07-N101 Set, RX-24F/RX-28 HN07-T101 Set,
RX-24F/RX-28 HN07-I101 Set
- NEW Frame : RX-24F/RX-28 FR07-H101 Set, RX-24F/RX-28 FR07-S101 Set,
RX-24F/RX-28 FR07-B101K Set, RX-24F/RX-28 FR07-F101K Set,
RX-24F/RX-28 FR07-X101K Set

**** CONTROLLING ENVIRONMENT**

- Software for Dynamixel control : ROBOPLUS - [Download](#)
- C/C++, C#, Labview, MATLAB, Visual Basic et. : Library - [Download](#)