

# GENERAL SPECIFICATION OF MD145SW-CAN



UPDATE : 2019-04-12

Control System	CAN BUS			
	Protocol (Mode)	Standard 2.0A	Extended 2.0B	UAVCAN
	Baud-Rate	10kbps ~ 1 Mbps		
	Sample-Point	50% or 87.5%		
	Available SERVO ID	0 ~ 254		
	Available Node ID	0 ~ 65535	0~2147483647	1~127
Input Signal Range	Input -12V~12V			
Position Sensor Type	Contactless encoder			
Operating Voltage Range	4.8 V ~ 7.4V			
Motor Type	Cored			
Controller(MCU)	32Bits			
Travel	Travel / Command	90° / 4096		
	Servo Mode	Left	Center	Right
	Pos Command	+84	+8192	+16300
	Pos ( Unit : ° )	-178	0	+178
	Turn Mode	Left	Power On	Right
	Pos Command	-16300	0	+16300
	Pos ( Unit : ° )	-358	0	+358
Turn Range	-32767 ~ +32767			
Voltage	At 4.8V	At 6.0V	At 7.4V	
No Load Speed	0.21sec/60° (285°/sec)(47RPM)	0.17sec/60° (352°/sec)(59RPM)	0.14sec/60° (428°/sec)(71RPM)	
Stall Torque	3.9kg-cm (54.45oz.in)	4.9kg-cm (68.42oz.in)	6.0kg-cm (83.78oz.in)	
Standing Current	30mA	30mA	30mA	
No Load Running Current	120mA	150mA	180mA	
Stall Current	1,600mA	2,000mA	2,500mA	
Dead Band	4Step	4Step	4Step	
Operating Temperature Range	-20°C ~ +60°C (-4°F ~ +140°F)			
Vibrations at No Load	MIL-STD-810G 514.6C-VII			
Storage Temperature Range	-30°C ~ +80°C (-31°F ~ +176°F)			
Connector Wire Length	300mm(11.81in)			
Outline Dimensions	30.0 x 10.0 x 37.0mm(1.18 x 0.39 x 1.45 in)			
Weight	27.7g (0.977oz)			
Ball Bearing	Dual Ball Bearing / MR85			
Case Material	Engineering Plastic			
Gear Material	1 Metal + Plastic & 4 Metal Gears			
Gear Train Backlash	Max 0.5°			
Horn Gear Spline	M25T (25 Segment Ø5.0)			
Splined Horns	MS-ML25			
Dust & Water Protect Class	-			

