

BLA1HH21 Technical Specification

(THIS DATA IS JUST A REFERENCE. IT IS NOT A GUARANTEED DATA.)

Item		Specification				Remark		
1	Communication Interface	PWM				Signal Voltage:V	HIGH : min. 2.0V max. Vcc	
						Frame Rate:T	3.0~30ms (Default 14.25ms)	
						Left/Center/Right:Td	2120/1520/920μs (Resolution recommends less than 1μs.)	
		S.BUS				Futaba Serial Protocol (Please ask us for more information.)		
2	Rated Voltage	6.0~7.4V DC				-		
3	Operating Voltage	4.0~8.4V DC				-		
4	Standby Current	≤ 45mA				at 6.0~7.4V		
5	Consumption Current*	LL	Me	UL	unit	at 7.4V , No-Load		
		235	365	545	mA	LL : Low Limit Me : Medium Value UL : Upper Limit		
6	Max. Torque*	LL	Me	UL	unit	at 7.4V		
		25.9	37.0	48.1	kgf-cm			
		2.54	3.63	4.72	N-m			
		359.7	513.8	668.0	ozf-in			
7	Rated Torque*	LL	Me	UL	unit	at 7.4V 20% of Max. Torque		
		5.2	7.4	9.6	kgf-cm			
		0.51	0.73	0.94	N-m			
		71.9	102.8	133.6	ozf-in			
8	No Load Speed*	LL	Me	UL	unit	at 7.4V		
		0.08	0.11	0.14	sec/60°			
		428.6	545.5	750.0	°/sec			
		71.4	90.9	125.0	rpm			
9	Default Travel Angle	CW 60° (920μs) CCW 60° (2120μs)				-		
10	Max Travel Angle	CW 90° (920μs) CCW 90° (2120μs)				Programming tool (CIU-2,S-Link) required.		
11	BackLash*	≤ 0.5°				-		
12	Operating Temperature Range	-30~+70°C (-22~158°F)				-		
13	Storage Temperature Range	-40~+80°C (-40~176°F)				-		
14	Outer Dimension	1.59 x 0.83 x 1.51 inch (40.5 x 21.0 x 38.4mm)				-		
15	Weight	3.07oz (87g)				-		
16	Case Material	Upper : AL / Middle : AL / Bottom : AL				-		
17	Gear Set Material	1st,2nd,3rd,4th(Final) : Metal				-		
18	Cable	Shielded Cable				Cable Length : 15.75 inch (400mm)		
19	Connector	Manufacture	Tyco Electronics					
		Type	TE794617-4					
		Mating	TE794616-4 etc.					
		Pin Assignment	1	White	S.BUS / PWM			
			2	Red	Vcc			
3	Black		GND					
4	Shield		Case Shield Line					
20	MTT(B)F*	300h (Calculated by Weibull analysis.)				Test Condition at 7.4V / Load : 20% of Max. Torque / 0.5Hz sweep (± 60°)		
21	Vibration Resistance *	Operating time ≥ 50h (at 7.4V)				Test Condition		
						Frequency range	80 to 400Hz	
						Acceleration	30G (294m/s ²)	
						Sweep rate	1.2 min / single-sweep	
						Vibration axis	X, Y, Z	

* Initial Performance Data at 23±5°C

All Specifications are subject to change without prior notice.

■ Caution

This product **SHOULD NOT** be used for the devices that is directly related to human life and/or harmful devices for human body such as below applications.

- (1) Medical Devices
- (2) Aerospace/Aviation Related Devices
- (3) Nuclear Related Devices e.t.c.

Outer Dimension

