

QFD velocity measurement methods			Specifics															Competitors				
			Time of acquisition	Time of computation	Maximum acceleration	Number of outliers	Velocity direction error	Speed error	Number of components	Total system weight	Maximum temperature	Maximum vibration	Water/dirt resistant level	System power consumption	Number of compatible vehicles	Time of assembly	Time of maintenance	Meantime between failures	Eagle Trento Racing Team	Formula1	AMZ driverless	
Competitors	Improvement direction		V	V	Λ	V	V	V	V	Λ	Λ	Λ	V	Λ	V	V	Λ					
Formula SAE car	Units		[ms]	[ms]	[m/(s^2)]	[#]	[deg]	[m/s]	[#]	[g]	[°C]	[Hz]	[IPxx]	[mW/h]	[#]	[min]	[min]	[s]	Ratings			
10	Requirements	Performance	●	●														3	5	4		
10		No slip affected			●													1	5	5		
11		High precision	○			●						○						4	5	5		
11		High accuracy	○		○		●	●										4	5	5		
5		Hardware	Compact						●	○							○	○	4	3	3	
4			Light						○	●									4	5	4	
9			Good environment range									●	●	●					○	2	4	4
5			Low power consumption		○										●					3	4	2
9		Usability	Compatibility			○						○	○	○		●			3	2	2	
7			Easy to assemble						○							●	○		3	3	2	
10			Easy to maintain						○							○	●		3	5	4	
9			Reliability															●	2	5	5	
100			Specifics quantitative values																			
Competitors	E-eagle Trento Racing Team		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
	Formula1		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
	AMZ driverless		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
	target (delighted)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
	target (disgusted)		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					