

Selection of the Power Type

Corresponding Customer Need	Importance of Criteria	Selection Criteria	Fuel Cell	RC Generator	Battery	Solar	Ref
CN1	9	Implementation with older generation	-1	-1	1	1	0
CN2	3	Estetically pleasing	1	-1	1	0	0
CN3	3	Smaller in mass	0	-1	1	0	0
CN4	3	Smaller in size	0	-1	1	0	0
CN9	9	Is portable	1	-1	1	0	0
CN10	9	Longer operation time	0	0	1	-1	0
CN15	9	Easy to mount on a vehicle	1	-1	1	0	0
CN11, CN12, CN13	9	Cheap in Price	-1	-1	1	0	0
Score			3	-45	54	0	0
Decission			discard	discard	consider	discard	

It was decided to implement battery

Selection of the battery type

Corresponding Customer Need	Importance of Criteria	Selection Criteria	Li ion	NiCd	NiMH	Alkaline	LiFeP04	LiMnNiO3	Ref
CN11, CN12, CN13	3	Cost	0	1	1	0	-1	-1	0
CN4	3	Size	0	-1	0	0	0	-1	0
CN3	9	Mass	1	-1	-1	0	0	0	0
Functionality	1	Can provide 12V	0	1	1	-1	1	1	0
Functionality	9	Reusability	1	-1	1	-1	1	0	0
Score			18	-17	4	-10	7	-5	0
Decission			discard	discard	discard	discard	discard	discard	

It was decided to use the Li-ion battery