Indoor Sensor Alternatives:

Evaluation Criteria	Relative Weight (0-1)	Candidates (Microcontroller) (0-5)			
		ESP32	**STM32 Discover**	**Pico Pi**	**Jetson Nano**
Price	1.0	5/5.0	3/3.0	5/5.0	1/1.0
Availability	0.9	5/4.5	0/0	5/4.5	3/2.7
Support	0.6	5/3.0	3/1.8	4/2.4	4/2.4
Performance	0.8	4/3.2	3/2.4	4/3.2	5/4.0
Ease of Use	0.5	5/2.5	1/0.5	4/2.0	3/1.5
Features	0.4	4/1.6	3/1.2	3/1.2	4/1.6
Candidate Totals		23/19.8	13/8.6	21/18.3	15/13.2

Evaluation Criteria	Relative Weight (0-1)	Candidates (Sensors) (0-5)		
		Ultrasonic	**Infrared**	**Magnetometer**
Price	0.8	5/4.0	5/4.0	1/0.8
Availability	0.7	5/3.5	4/2.8	4/2.8
Support	0.3	3/0.9	3/0.9	4/1.2
Reliability	0.9	4/3.6	1/0.9	5/4.5
Ease of Use	0.8	5/4.0	5/4.0	1/0.8
Size	0.9	5/4.5	5/4.5	1/0.9
Candidate Totals		27/20.5	23/17.1	16/11

Indoor Sensor Cost Analysis:

Component	Quantity	Price	Total
HC-SR04	2	$2.6	$5.2
RGB LED	1	$2.8	$2.8
Resistors	3	$0	$0
Xbee S2C Chip	1	$47	$47
ESP32	1	$11	$11
PCB	1	$5	$5
Case	1	$0	$0
Power Brick	1	$0	$11
Total	$82		