

Rover Telemetry Ranges

As outlined by the mission description, it is your job to alert a user of values outside of the ranges specified below. If a nominal value is specified, then a user should be alerted that they are deviating from that nominal value, even if they are still within the min/max values. The alerts, whether audible or visual, can be designed as you see fit based on your hardware/software.

Value Name	Units	Min	Nominal	Max
pitch	deg	-50.00	-	50.00
roll	deg	0.00	-	50.00
speed	m/s	0.00	-	18.00
throttle	%	0.00	-	100.00
steering		-1.00	-	1.00
distance_traveled	meters	0	-	No Max
surface_incline	deg	-50.00	-	50.0
distance_from_base	m	0.00	-	2500.00
oxygen_tank	%	25.00	-	100.00
oxygen_pressure	psi	2997.00	-	3000.00
fan_pri_rpm	rpm	29999.00	-	30005.00
fan_sec_rpm	rpm	29999.00	-	30005.00
cabin_pressure	psi	3.50	4.00	4.10
cabin_temperature	°C	50.00	70.00	90.0
external_temp	°C		-	
coolant_pressure	psi	495.00	500.00	501.00
coolant_storage	%	60.00	-	100.00
battery_level	%	30.00	-	100.00