

Group 3		
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Topic: Traffic lights

Functional Requirements	
Number	Description
TF.FR.1	Shall include button for emergency case (Fire truck, Military vehicle, Police car, Ambulance) which help the police to control the vehicle traffic.
TF.FR.2	Shall include emergency mode in which red time is truncated to improve safety and expedite the movement of authorized emergency vehicles and include a display screen “Emergency” that indicate to emergency vehicle drivers whether preemption has been granted or not.
TF.FR.3	Shall support different timings for peak and off-peak traffic hours. + Peak hours: Green (60 secs), Yellow (3 secs), Red (30 secs). + Off-peak hours: Green (40 secs), Yellow (3 secs), Red (35 secs).
TF.FR.4	Shall control traffic using actuated timing as specified in the plans, and under central control where specified. The signal shall use standard red-yellow-green indications.
TF.FR.5	Shall support different timings for peak and off-peak traffic hours. Default settings: + Peak hours: Green (60 secs), Yellow (3 secs), Red (30 secs). + Off-peak hours: Green (40 secs), Yellow (3 secs), Red (35 secs)
TF.FR.6	Shall operate normally after emergency case.
TF.FR.7	Shall be able to communicate with product by using software to operate the traffic lights.
Non-functional Requirements	
Number	Description
TF.NFR.1	Shall include display screen, no smaller than 3.4 inches.
TF.NFR.2	Shall be fully functional and operational under 100% humidity.
TF.NFR.3	Shall operate with single power supply.
TF.NFR.4	Cost is smaller than 400.000 VND.