RPI & M6E Nano power consumption (Wh)	Rf On mode (Wh)		Idle mode (Wh)	
RFID M6e Nano reader requires 720 ma (x 5 vdc = 3.6 W) in full RF On Antenna power (+27 dBm). When idle with powermode=MAXSAVE, it consumes only .8 ma (x 5 vdc = .04 W).	3.6		0.04	
Raspberry PI Zero 2W - Peak at 370 ma (x 5 vdc = 1.85W) with active Wifi, 125 ma (x 5vdc = .625 W) in idle mode (display/HDMI turned off).	1.85		0.625	
Other components: USB CH340G (30ma/.2ma) + SEN-17372 PIR (170ua) + PiRTC PCF8523 (150na).	0.15		0.01	
Total power consumption (in Wh)	5.60		0.68	
Percentage of time in each mode (adds up to 100%)	10%		90%	
Efficiency of Voltage Regulator Buck Converter (estimated at 90%)		90%		
Estimated duration (in hours) LiFEPo 12.8V 8A battery (with 10% reserve)				71.04

Average hourly power draw = (5.6 Wh x 10%) + (0.7 Wh x 90%) = 1.19 Wh
Advertised battery capacity = 12.8 V x 8 A = 102.4 W
Reduced by voltage converter loss (estimated at 10%) = 102.4 W x 90% = 92 W
Reduced by battery reserve (10%) = 92 W x 90% = 83 W
Maximum operation time = 83 W / 1.19 Wh = 69 hours