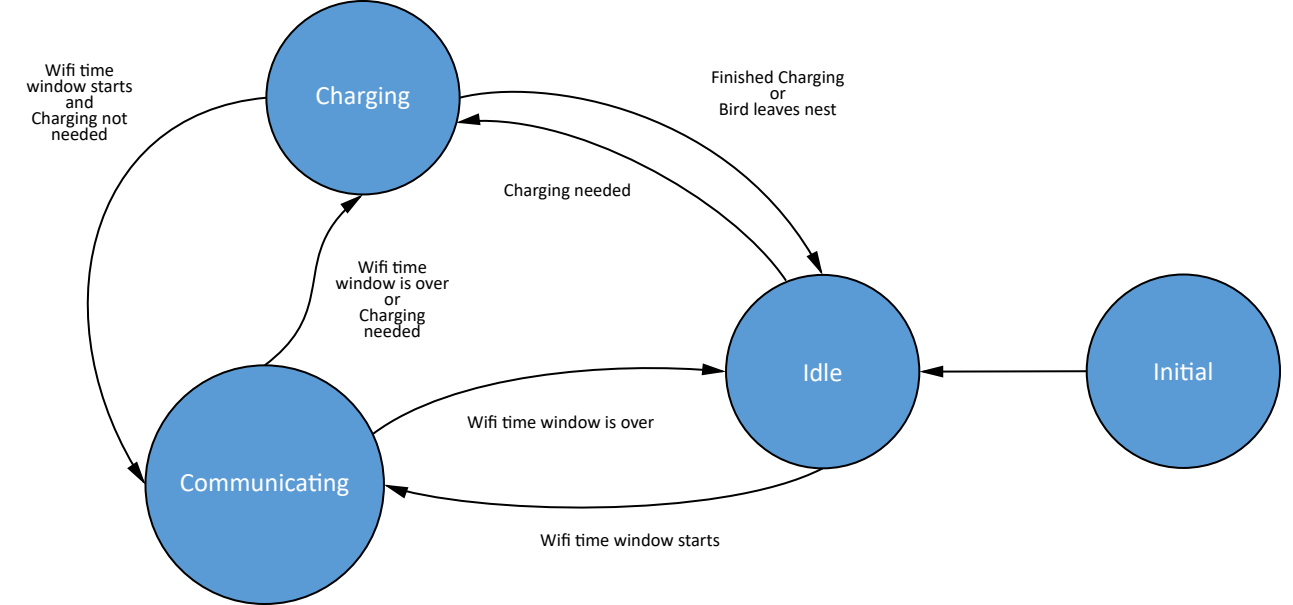
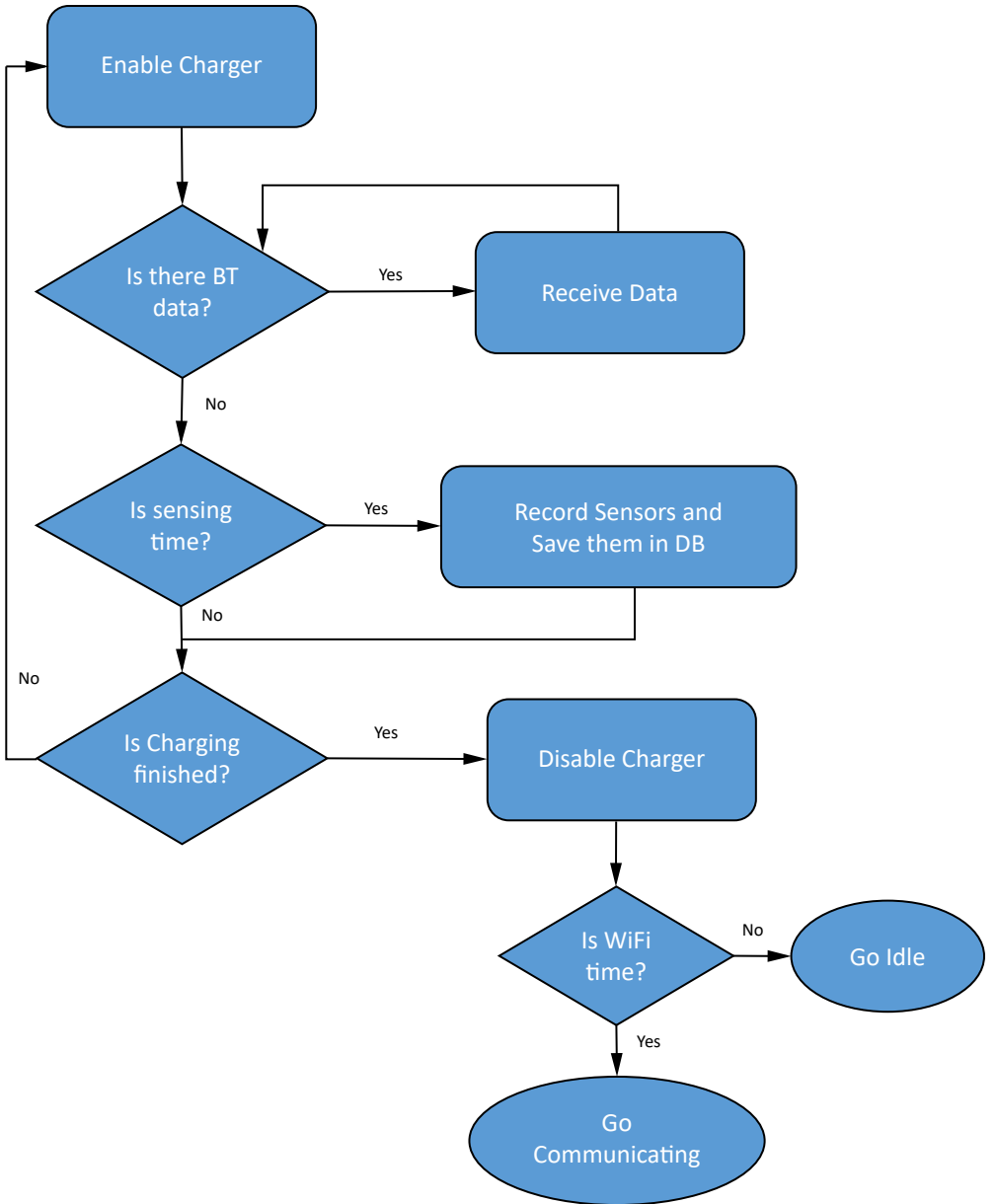
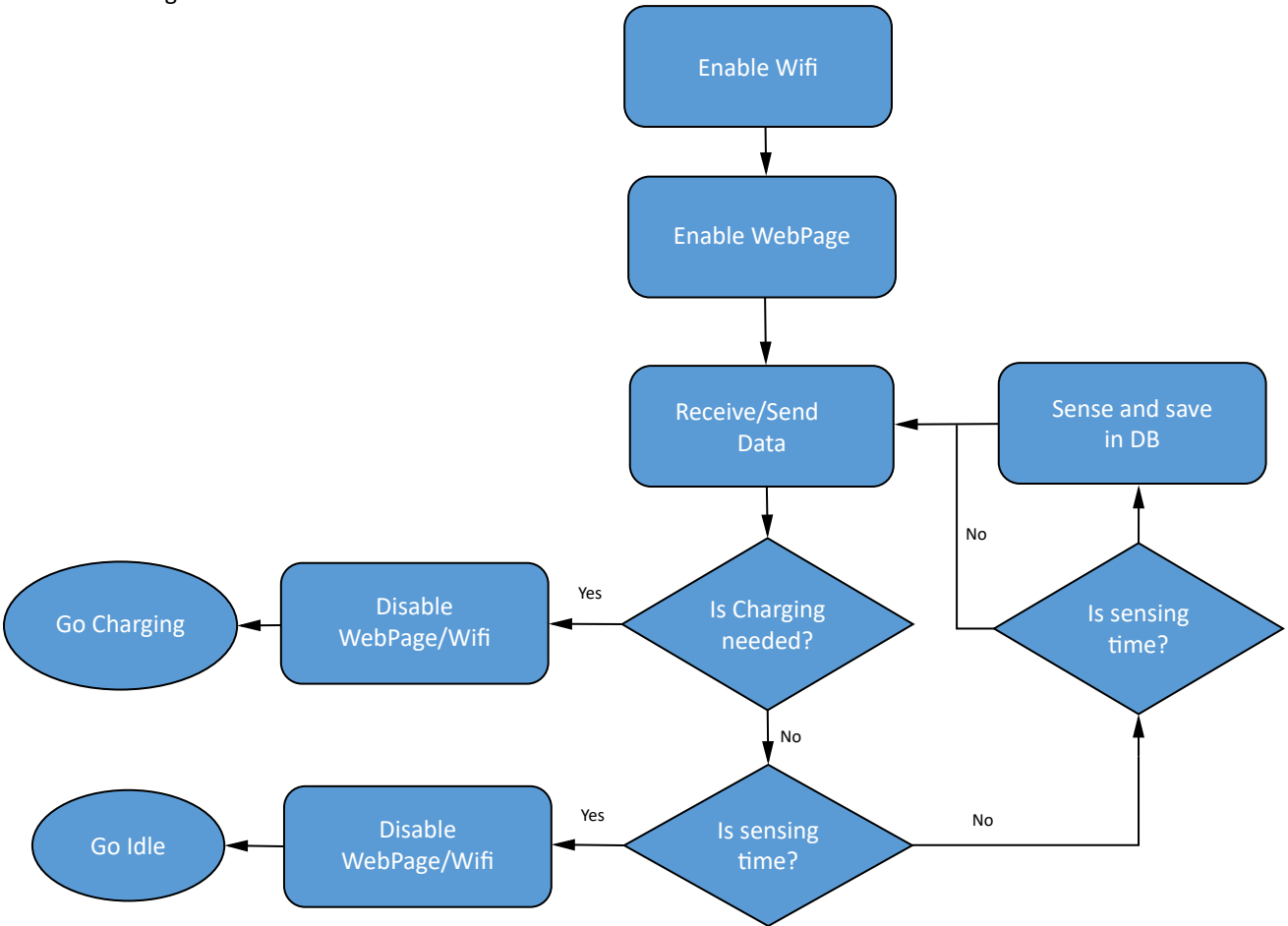

Charging
Idle
Initial
Communicating
Wifi time window starts and Charging not needed
Finished Charging or Bird leaves nest
Charging needed
Wifi time window is over or Charging needed
Wifi time window is over
Wifi time window starts

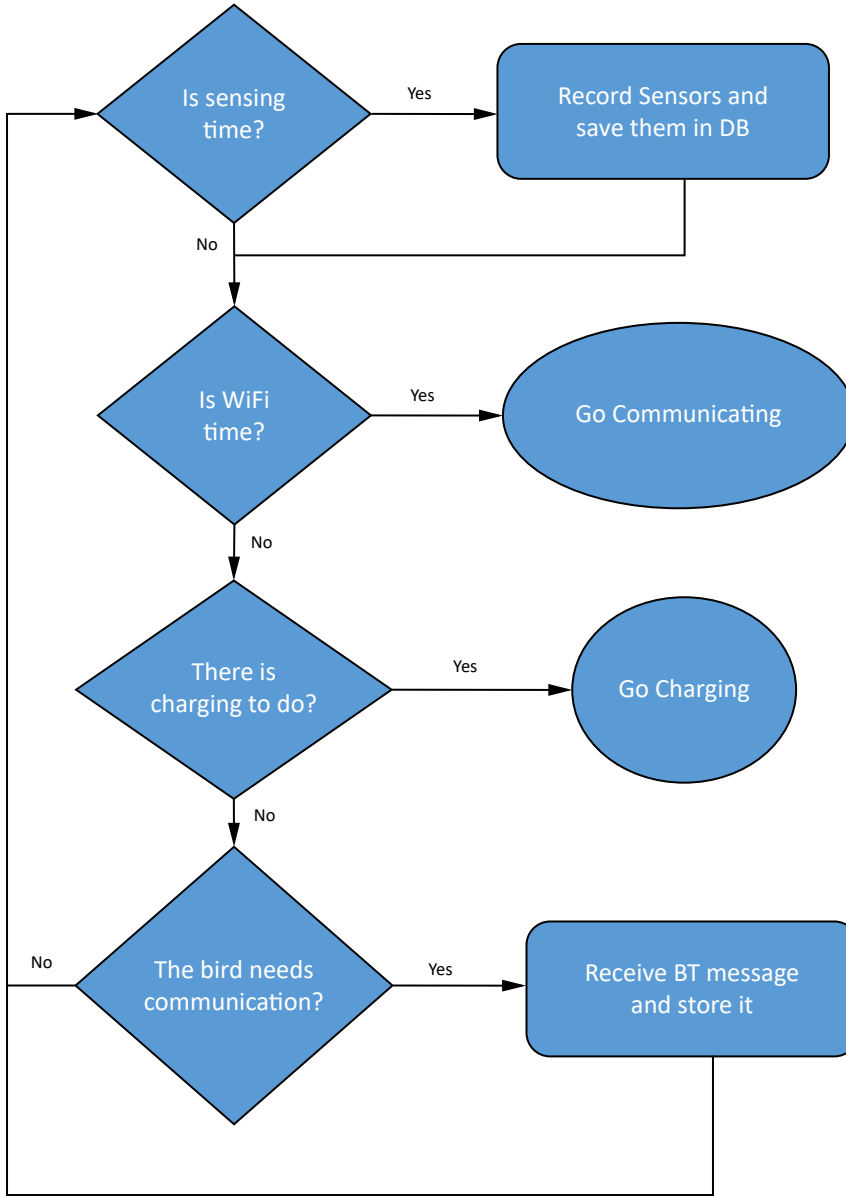
Charging state



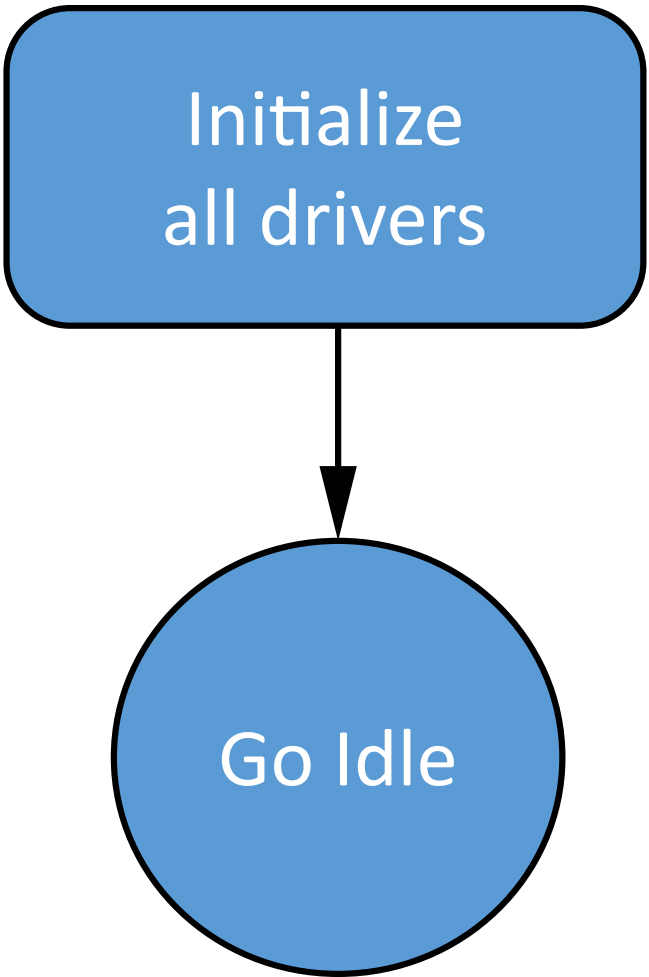
Communicating state

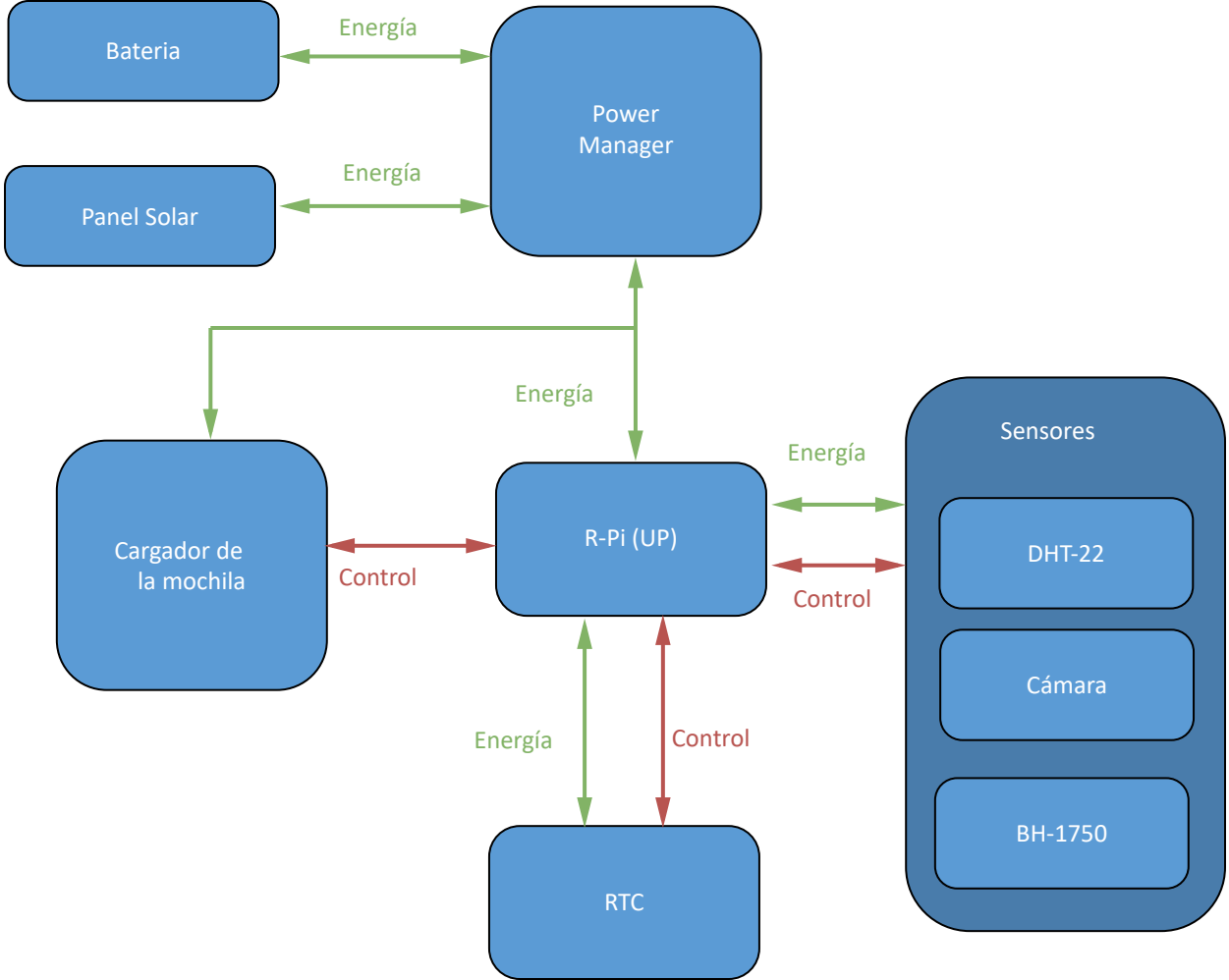


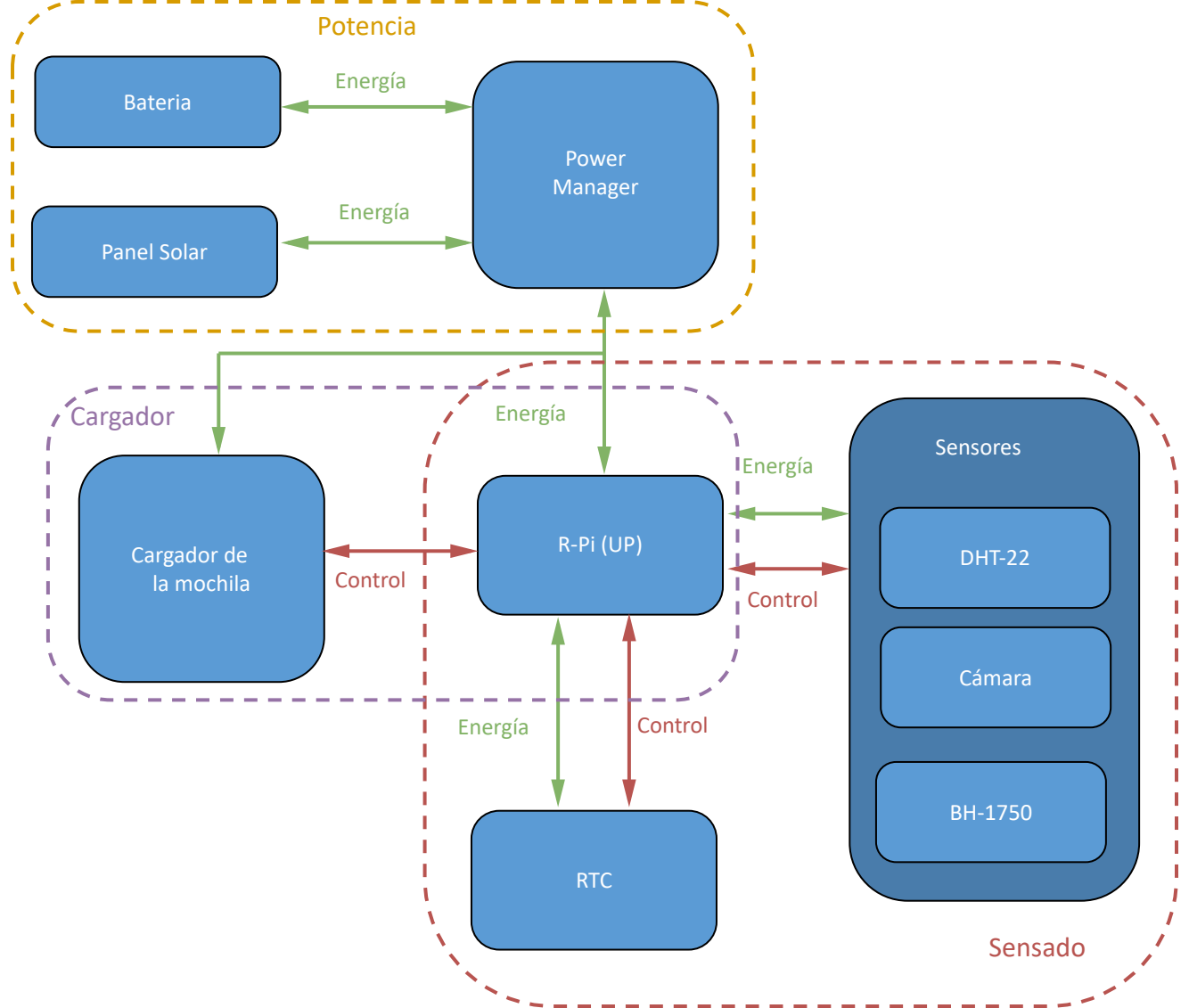
Idle State

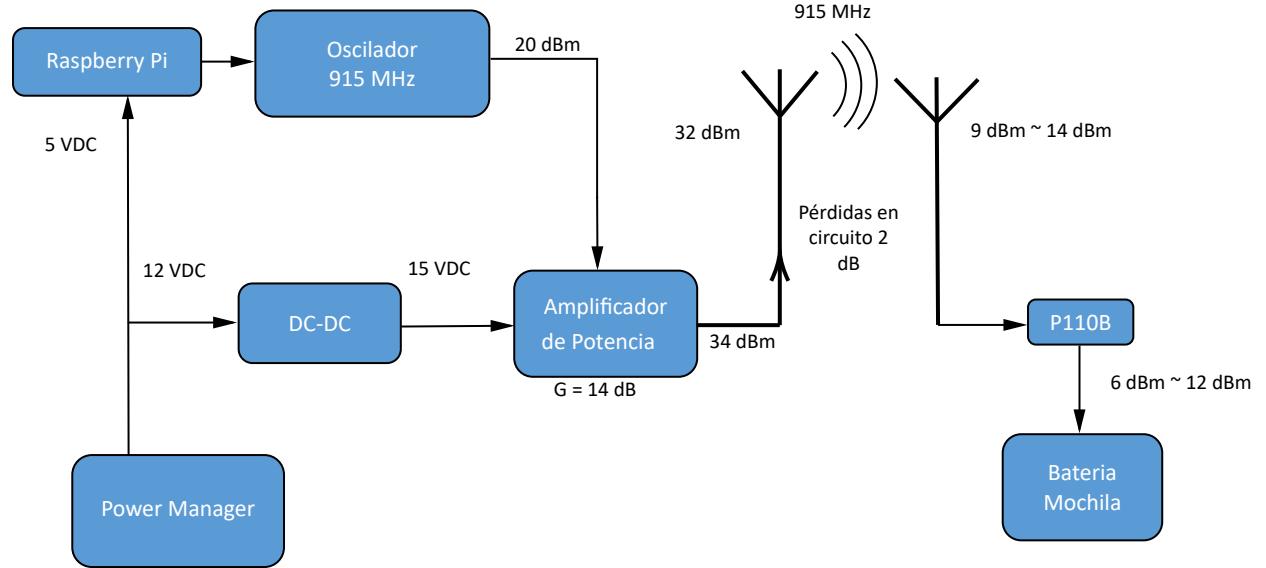

Is sensing time?
Yes
Record Sensors and save them in DB
No
Is WiFi time?
Yes
Go Communicating
No
There is charging to do?
Yes
Go Charging
No
The bird needs communication?
No
Yes
Receive BT message and store it

Initialize State




Bateria
Energía
Power
Manager
Panel Solar
Energía
Energía
Sensores
Energía
Cargador de
la mochila
Control
R-Pi (UP)
Control
DHT-22
Cámara
BH-1750
Energía
Control
RTC


Potencia
Bateria
Energía
Power
Manager
Panel Solar
Energía
Cargador
Energía
Sensores
Energía
Cargador de
la mochila
Control
R-Pi (UP)
DHT-22
Control
Cámara
Energía
Control
BH-1750
RTC
Sensado


Raspberry Pi
Oscilador
915 MHz
20 dBm
915 MHz
32 dBm
9 dBm ~ 14 dBm
5 VDC
Pérdidas en
circuito 2
dB
12 VDC
15 VDC
DC-DC
Amplificador
de Potencia
34 dBm
P110B
G = 14 dB
6 dBm ~ 12 dBm
Power Manager
Bateria
Mochila