



Application Note

Rev 01

AN53 – Effect of Battery Charge % on IPC Behaviour

Important Note

Solenoid/valve control continues as per the IPCs schedule until the battery is completely flat, regardless of radio communication.

There are two specific charge levels at which an IPCs communication behaviour changes.

1. **Battery Charge % falls below 20% (IPC enters hibernation)**
 - When an IPC enters hibernation, radio communication is halted to preserve battery for the primary function of solenoid/valve control.
 - An IPC in hibernation can be identified by the LED flashing briefly every 10 seconds.
Older IPCs with red LEDs can be difficult to see, you may need to shield the IPC from the sun.
2. **Battery charge % increases to over 40% (IPC exits hibernation)**
 - IPC radio communication is resumed.

Communicating with an IPC in Hibernation

If an IPC is in hibernation there is still a way to query its status using an EP3.

1. Briefly place a magnet on the IPC magnet label
 - LED will start flashing quickly (bootloader mode active)
2. Wait for the LED to stop flashing (approx. 60s)
3. Send a status request
 - You will have approx. 30s, after the LED has stopped flashing, in which a status response can be retrieved.

For more information email support@waterinsight.co.nz