



## Application Notes










Rev 01

### AN45 – IPC Status Indicators in IMS

#### Introduction

IMS uses a colour coding system when displaying sensors, equipment and sprinkler controllers (IPC) on the screen. Units are polled periodically and the poll interval can be adjusted to poll frequently if the site is busy (in summer say) or infrequently in winter when watering does not normally occur.

This table provides a summary of the colour codes:

	OK	Status is normal
	Caution	IPC low battery, schedule problem, clock error
	Issue	IPC out of contact for more than 30 days
	Watering	IPC is active, valve open based on schedule
	Inhibited	IPC will not water, schedule interrupted
	Sensor	Position of sensor or gateway
	Spare	IPC is a spare or out of service
	POI	Point of interest, feature marker not an IPC
	Filter	Excluded items when filtering is applied

For the most part operators will check the condition of IPCs to see if they are scheduled to water (blue) and if they are not green (normal) then the status can be further investigated. Orange indicates a warning and should be attended to and red indicates that the unit has gone completely out of contact and should be visited.

The most common orange warnings are:

- Clock errors indicate that the time on an IPC is more than a minute out from the time on the INC, this is usually fixed when the INC periodically synchronises the time on the site but may need to be fixed with an EP3 if the problem persists. Units that drift out of time frequently should be returned for service.
- Low battery indicates the number of IPCs that have fallen below the threshold for low battery capacity in your system. The threshold is configurable for each system but is normally set at something like 50% remaining capacity. Battery voltages go up and down but voltages that are “tanking” may indicate the end of life of a battery if it has been in for a few years.
- Schedule issues show the number of IPCs in the system that have a discrepancy between when the IMS thinks that watering should be active and when the IPC is actually scheduled to water. This is fixed by send the schedule from IMS

Out of contact or offline (red) units mean that no contact with them has been made for the last 30 days. This could be because the battery voltage has fallen below 20% at which point the unit attempts to save power by diverting all its energy into valve operation for watering at the expense of allowing radio communications. It could also mean that the INC is not communicating effectively to it because of the location of the device (perhaps in a deep gully or behind a hill. These units should be visited with an EP3 to diagnose the issue.

Pink and Brown are special conditions. Brown means that the operator has removed the IPC from its position but wants to retain that position as a placeholder in case they decide to put an IPC back on. Pink units are deliberately marked as out of service. Some farms hold spare units in a garage. If they are out of service, they can still be polled but the results don't affect the overall condition of the site.

Figures 1 and 2 show how these colour codes look on sites. Unit 034 in figure 2 is inhibited, SPR1 in figure 1 is out of service, YE36 in figure 1 is a post placeholder. Site 1 in figure 1 is a soil moisture sensor array.

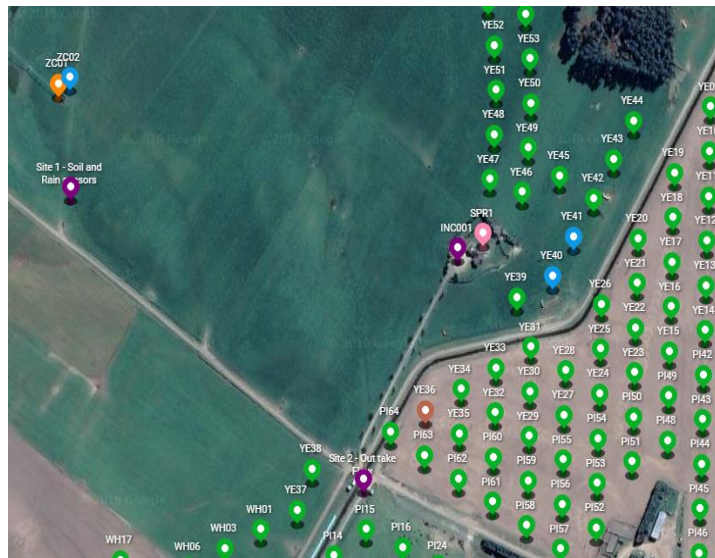


Figure 1

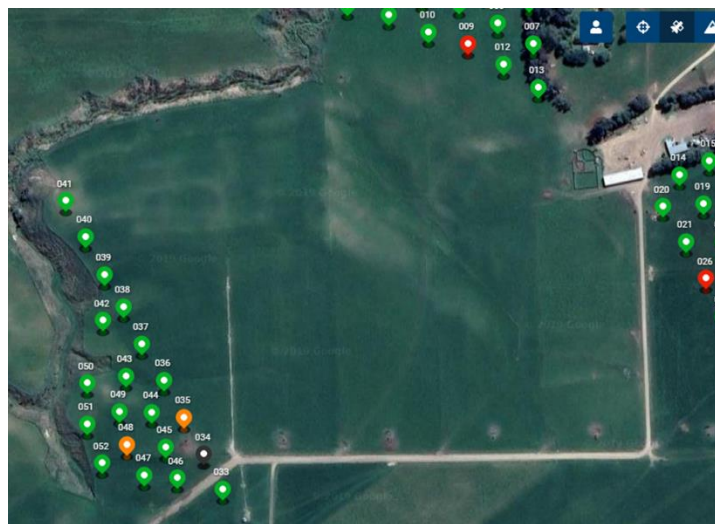


Figure 2



For more information email [support@waterinsight.co.nz](mailto:support@waterinsight.co.nz)