WATER-INSIGHT

Application Notes

Rev 01

AN11 - INC – Bootloader Firmware Upgrade Procedure

Introduction

This document describes how to upgrade the Bootloader Firmware in the Irrigation Network Controller (INC). Application firmware is upgraded using the touchscreen interface on the INC (Refer to INC user guide).
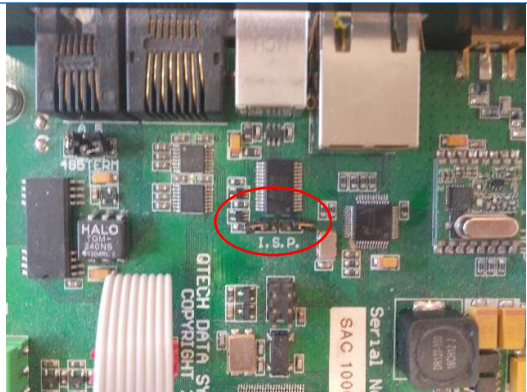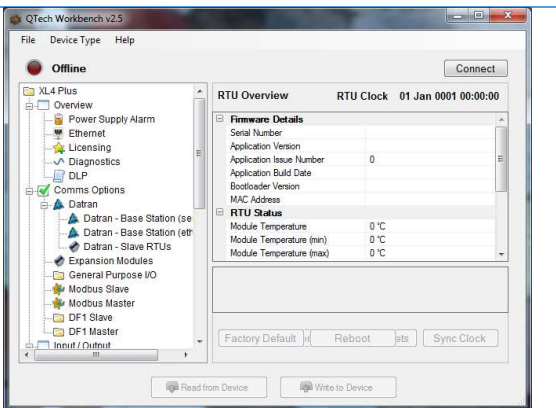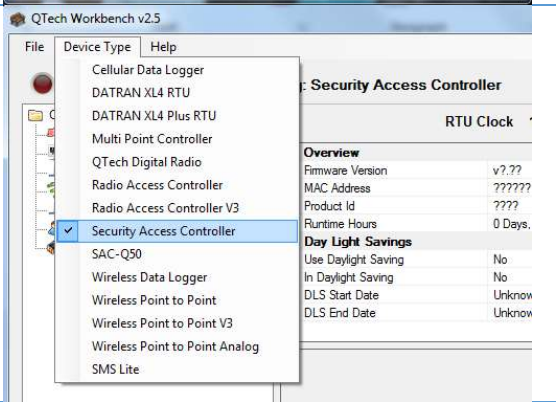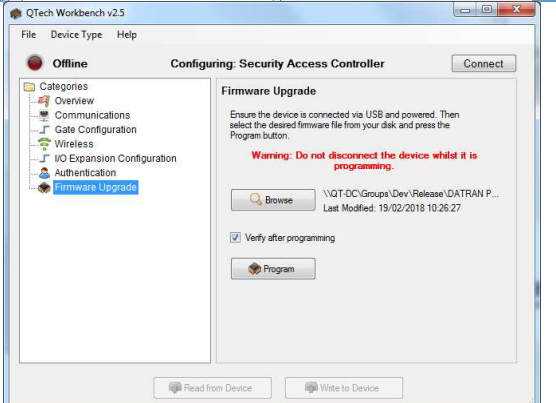
Equipment Required:

- Water-Insight Workbench V2.05 or later running on Windows laptop or similar device
- USB cable A-B
- Jumpers (usually sitting on one of the ISP pins on the INC main board)

Procedure

The upgrade procedure should be undertaken by professionals trained in the handling of electronic products from Water-Insight. At all times please use practices for avoiding static discharge onto the device including:

- Handling the board as little as possible and only at the edges
- Ensuring that you ground yourself to reduce the risk of static discharge prior to handling the device

Step	Procedure	Notes
1	Turn off the power to the INC	
2	Carefully remove the case lid of the INC. There are no screws to remove.	
3	Locate the In-System-Programming (ISP) jumpers and insert the jumpers	
4	Turn on the power to the INC	

5	**Connect the USB cable to the laptop and launch Water-Insight Workbench software**	
6	Select the <u>SAC</u> device type in Workbench	
7	- Select the Firmware Upgrade Category - Browse to locate the firmware upgrade file supplied by Water-Insight. - Click the program button	
8	- Once programmed and verified turn off the power to the INC. - Remove the ISP jumpers - Replace the case cover - Turn on the power - Using Workbench click the connect button to establish a connection to the unit - Click the overview category. It should populate with the device configuration thus verifying that it is operating	*Note: When the power is turned on the INC CPU OK LED should be blinking to indicate normal operation.*

Notes

Upgrading the firmware should not result in the loss of configuration data. However, the settings shown in workbench should be checked and reconfigured if necessary.

Do not set factory defaults unless instructed to by Water-Insight support.

For more information contact Water-Insight support@waterinsight.co.nz