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Wireless Connection Module (WCM)
LAUNCH PACK

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Solartron Metrology

Wireless Connection Module – Table of Contents

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Introduction : Wireless Connection Module (WCM)

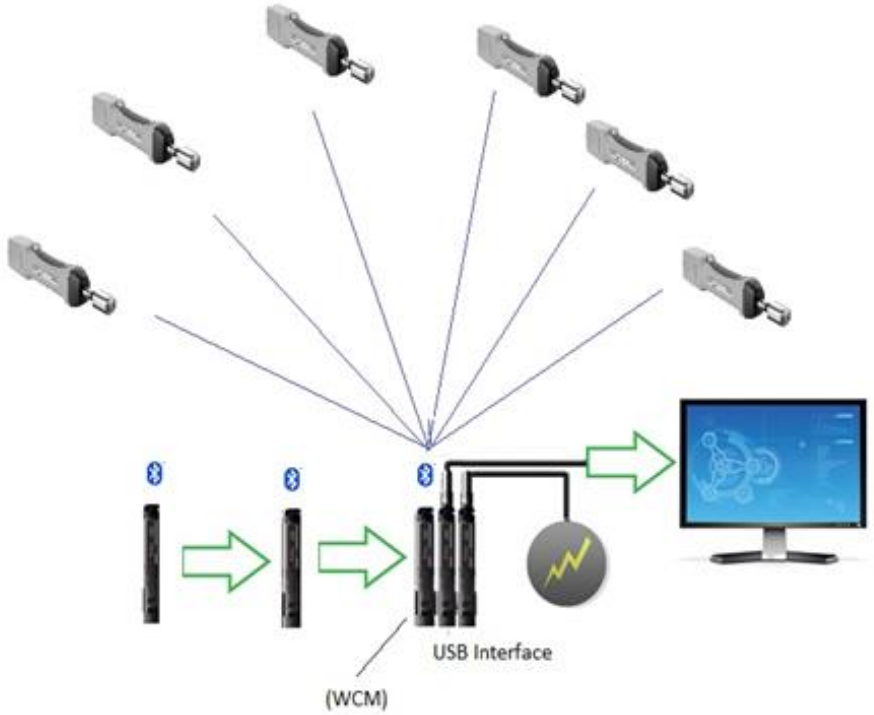
- **WCM**: An Orbit3 Module that provides an interface between the Orbit Digital Measurements Network and Solartron Wireless Hand Tools.

- The WCM can connect with up to 6 Wireless Hand Tools.

- Provides a Robust Interface
  - Avoids need for 3rd party Bluetooth Dongle
  - Avoids need for 3rd Party Bluetooth Drivers including Microsoft
  - Fully integrated with Orbit
    - Allows Wireless Hand Tools and other Orbit transducers to be easily integrated

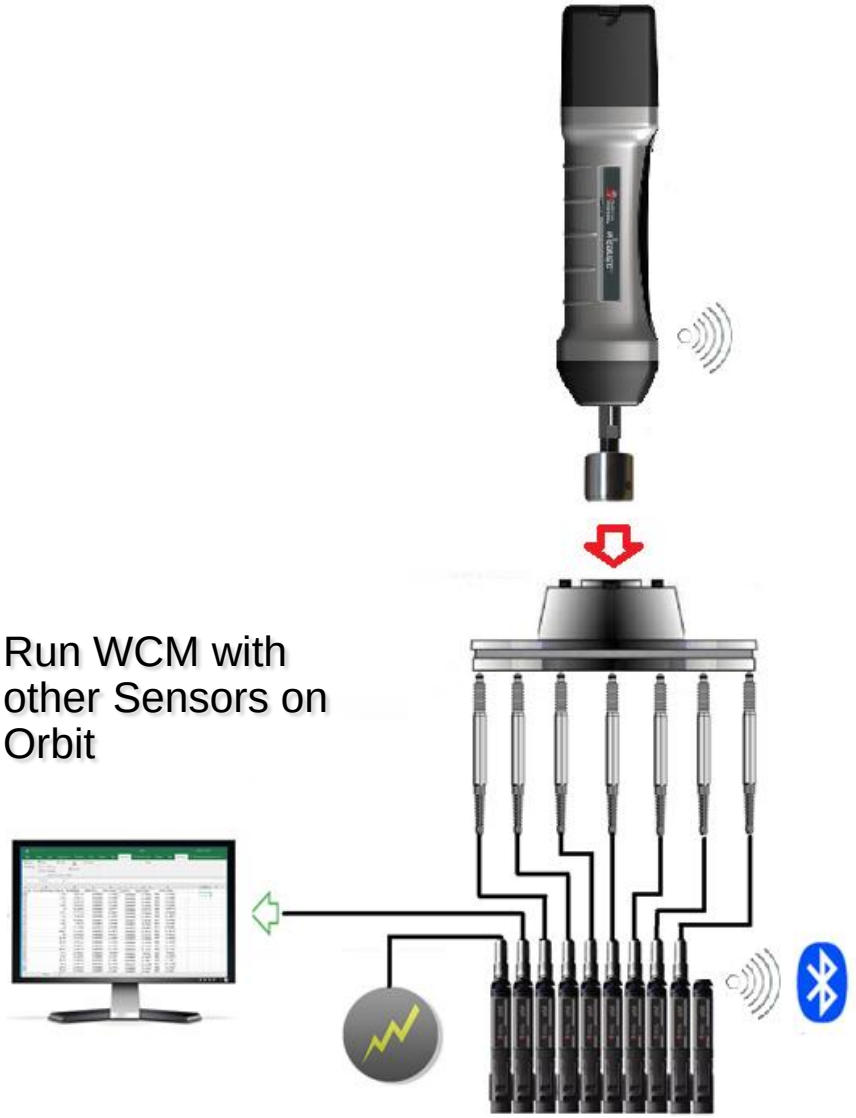
Introduction : Wireless Connection Module (WCM)

- Multiple WCM modules can be connected on the Orbit bus
  - If more than (6) wireless channels required, then add more WCM modules
- Allows Wireless Hand tools to be left connected
  - No need to connect/disconnect if more than 6 tools required
- Set up Software and Manuals are Part of Orbit Support Pack from Version 1.5.9



Wireless Connectivity Made Easy

WCM: Powered by USBIM (up to 2 WCM modules) or PSIM



Run WCM with other Sensors on Orbit

Wireless Connection Module DATA SHEET

- Data Sheet Number 503474 Z:\Common\Datasheets\WCM

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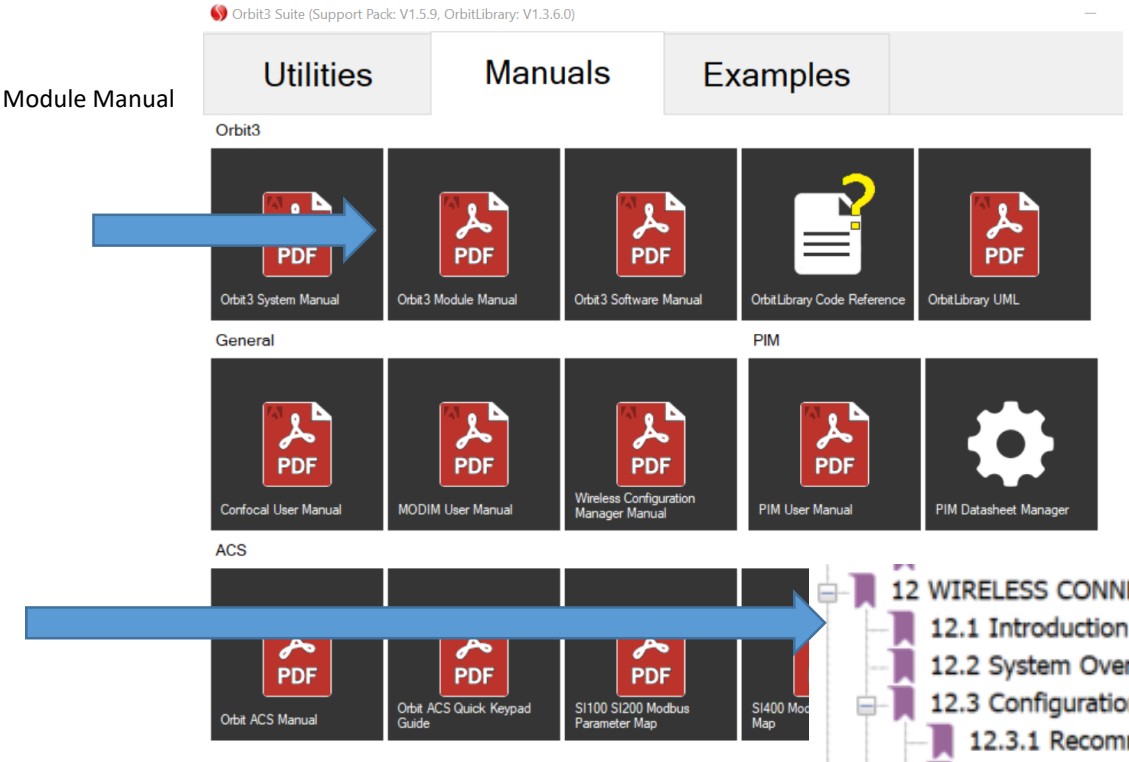
Wireless Connection Module

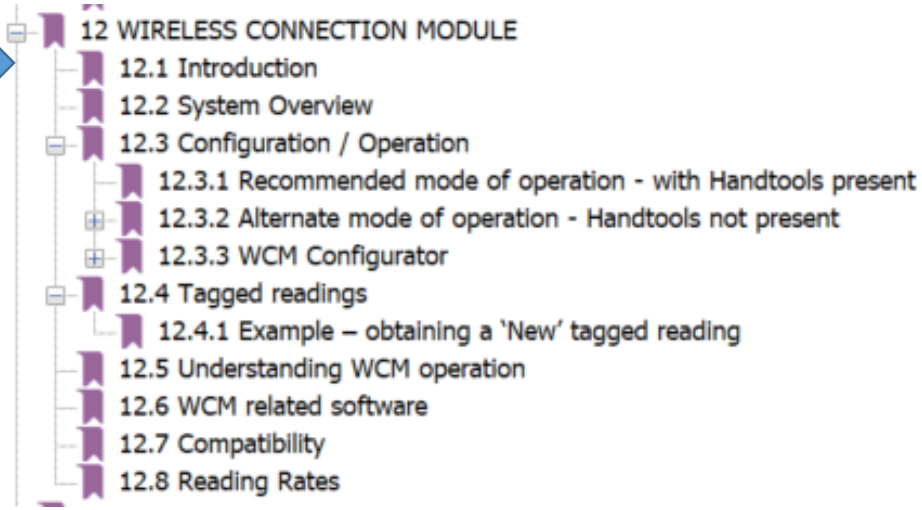
- Allows wireless products to be read directly via Orbit®
- Connect up to 6 Solartron Wireless products per module.
- Does not need to use Windows or 3rd party Bluetooth® drivers.

WCM – OPERATING INSTRUCTIONS

Sales and Marketing Information - Operating Instructions

Orbit Module Manual





WCM – Set UP 1

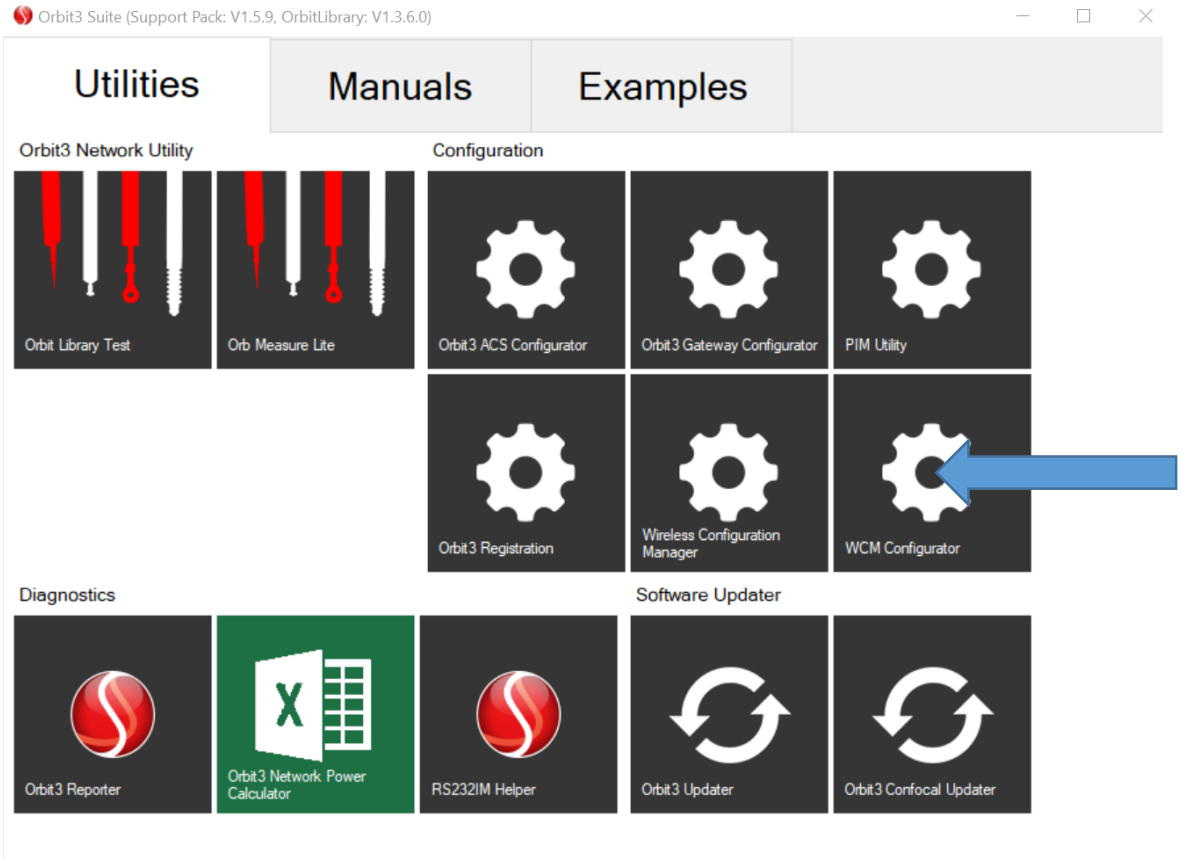
How to Set up the WCM

Stack WCM and USBIM.

Turn on Wi Gauges to be connected

WCM – Set UP 2

Open WCM Configurator



Configurator Program is in Orbit Suite used to set up the WCM and link it to hand tools

Run Orbit Suite and Click on Configurator

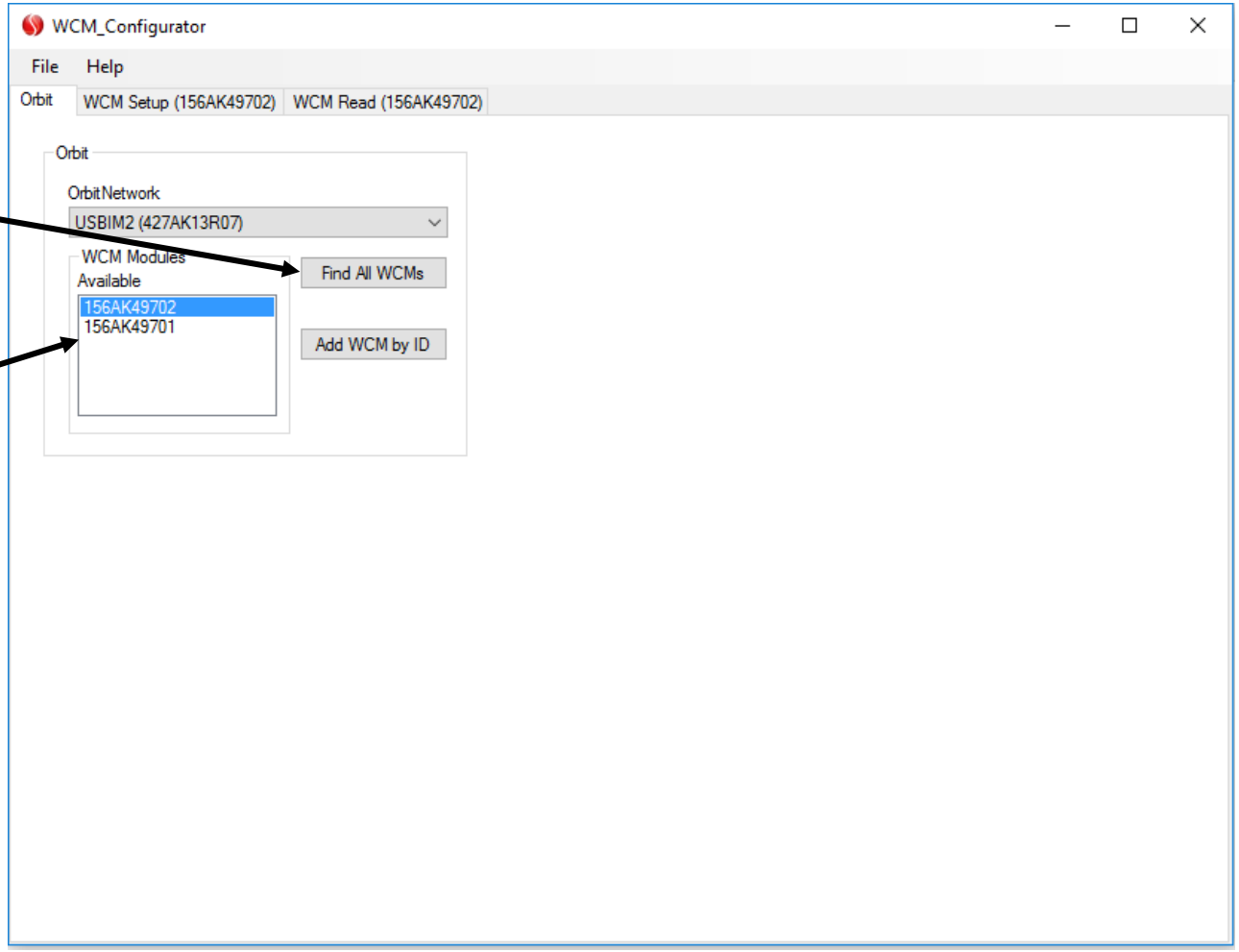
WCM – Set UP 3

Select WCM Module

Click “Find all WCMs

WCM modules are listed by Serial Number

Click on serial number of WCM to configure

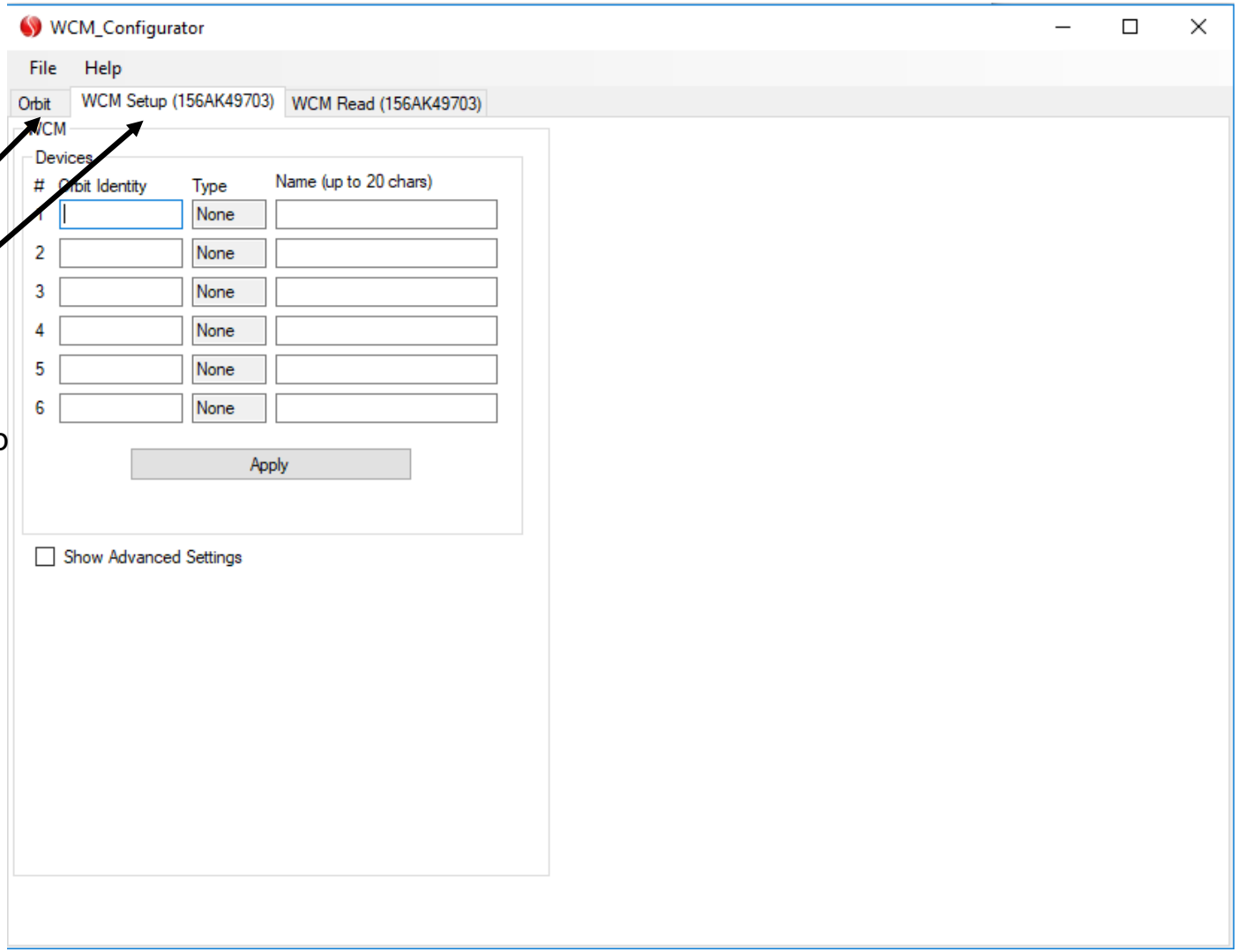


WCM – Set UP 4

Go to SETUP Tab

Next screen with TABS appears

Click on the ‘Setup’ Tab



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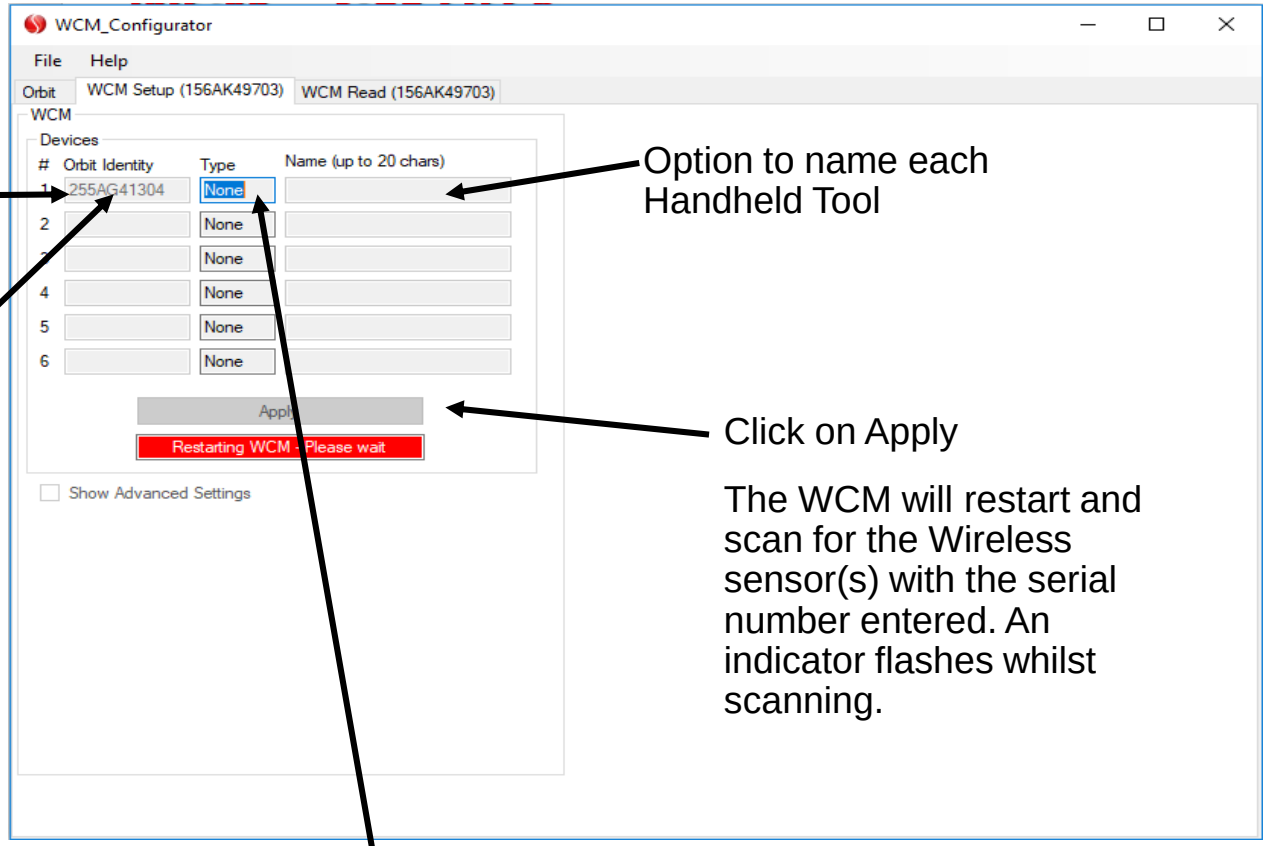
Set up Wireless Tools with WCM

A table with six blank rows will appear.

Click on a table location and enter manually the Wireless Sensor Serial Number



Option to name each Handheld Tool

Click on Apply

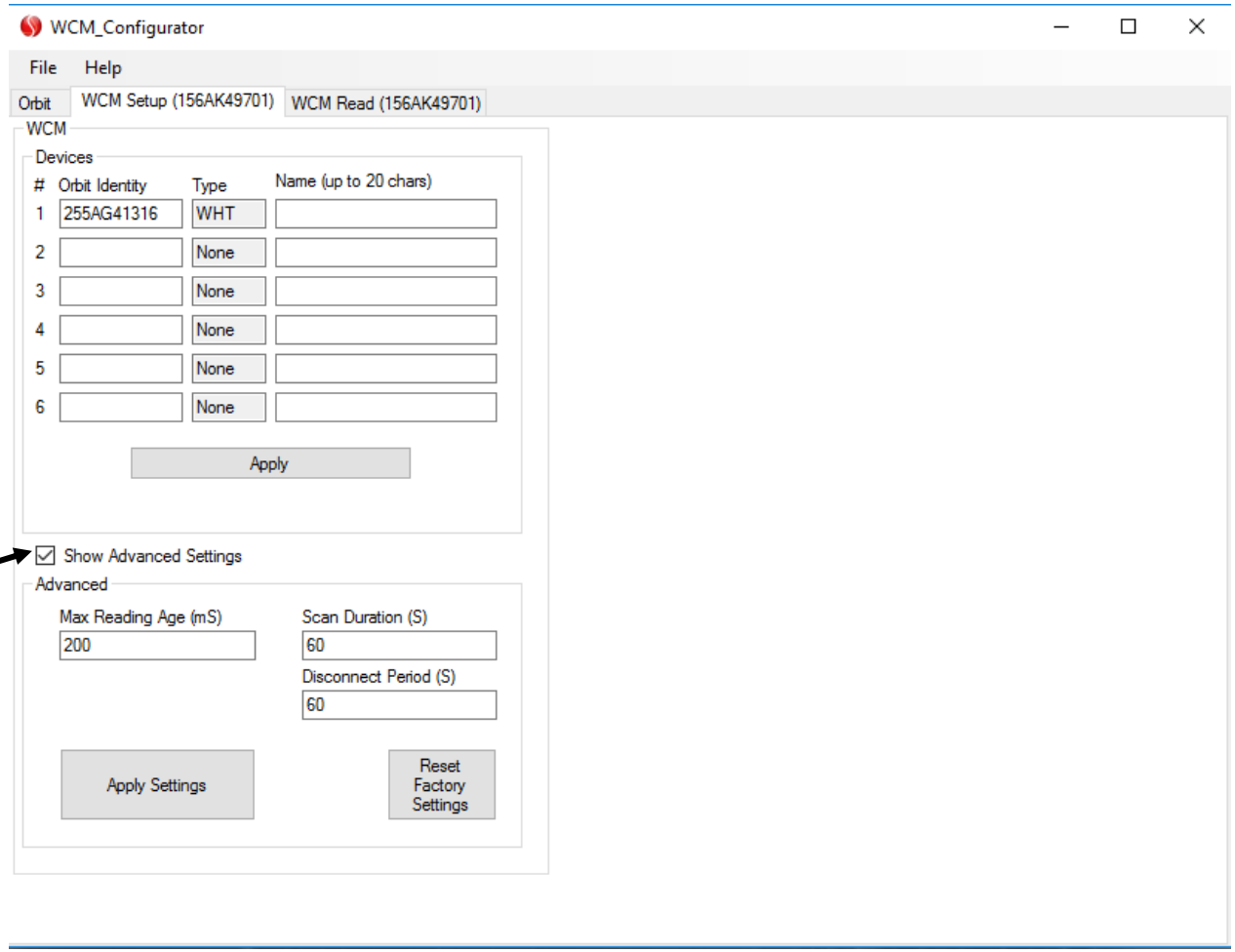
The WCM will restart and scan for the Wireless sensor(s) with the serial number entered. An indicator flashes whilst scanning.

When the WCM has located the sensor, the sensor type appears next to the serial number in the table

Repeat process for each Wireless sensor

WCM – Set UP 6

Optional: Set up the WCM ADVANCED SETTINGS



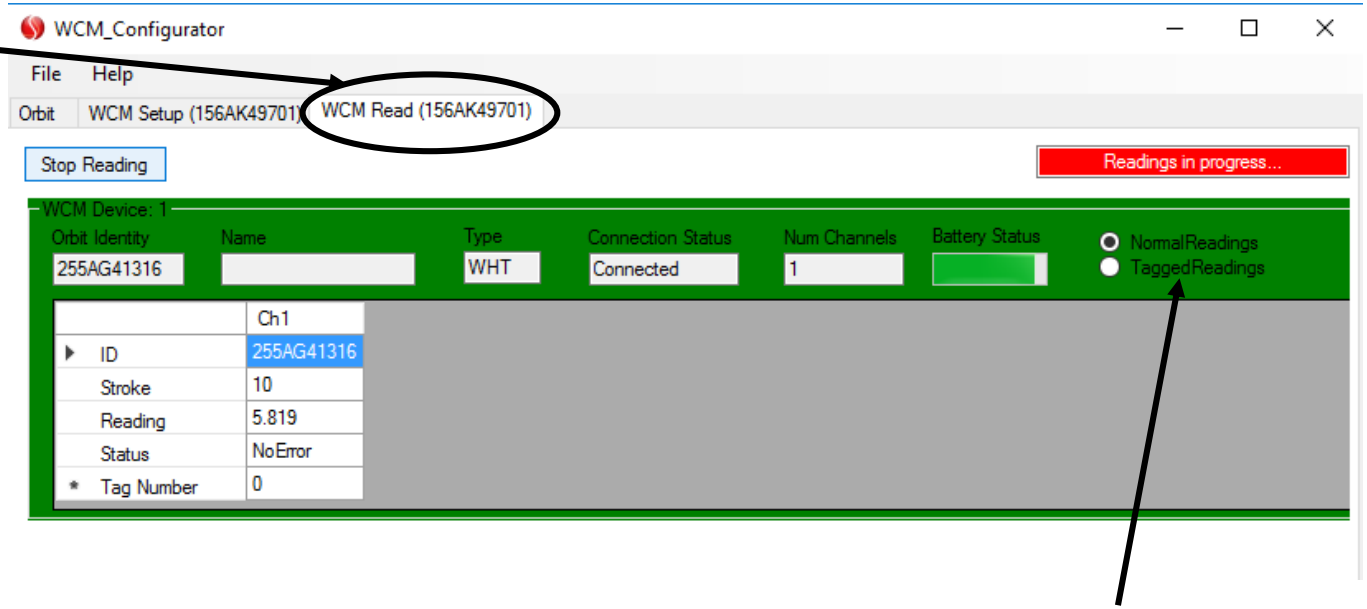
Use advanced settings to set Scan Duration Time and Disconnect Period or leave default settings. Click on parameter locations to change and click “Apply Settings” to finish

(see Orbit Module Manual Section 12 for more detail)

WCM – Set UP 7

Obtain readings on WCM Configurator

Select WCM Read Tab



Check Wireless Sensor operation restart by moving probe(s)

The background colour indicates the Wireless Sensor state:

Red = Not Connected

Yellow = Connecting

Green = Connected

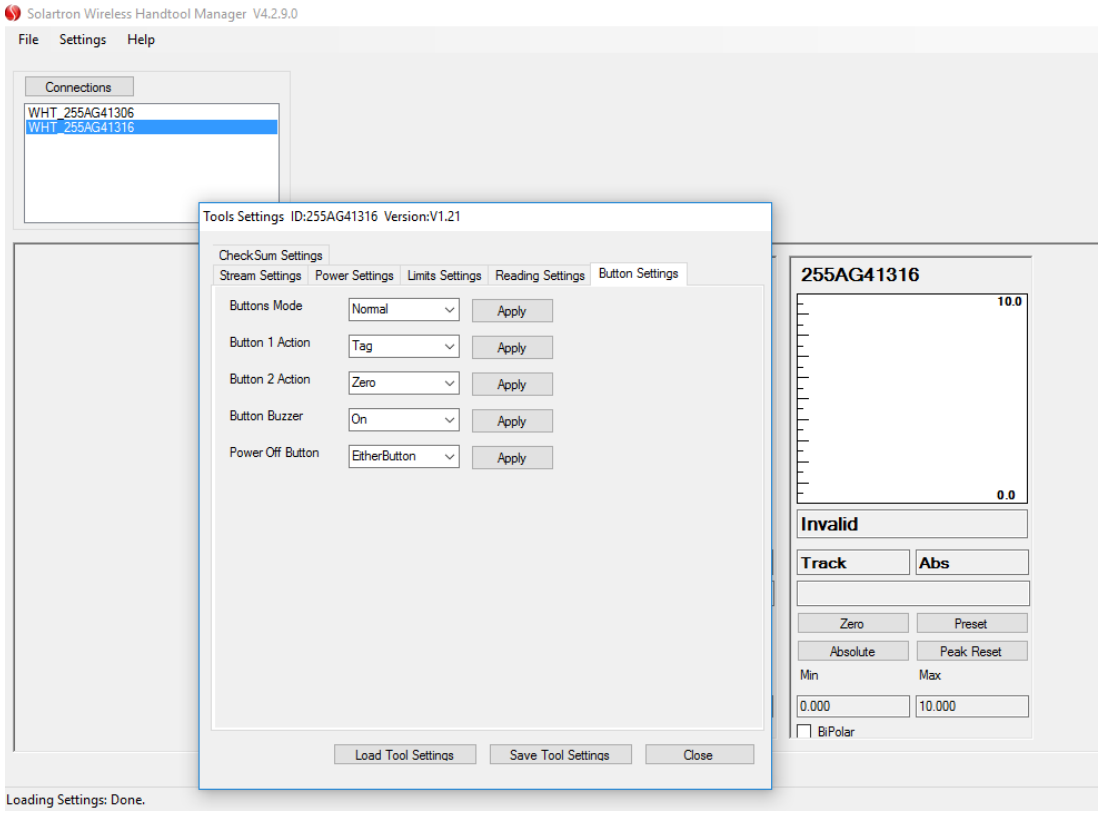
Use options to switch between normal and tagged readings

WCM – Set UP 8

Wi Gauge Settings

To change settings for Wi Gauge unit, use “WHT Manager” in the Wireless Support Pack

- *Button Settings, WHT Limit Settings, etc.*



WiGauge Tagged Readings

Wi Gauge must be set to Tag Readings

Reading and Tag number is sent to WCM

Use software commands to pull data from WCM.

- *Look for next tag number for next piece of data*

WCM – Programming Example

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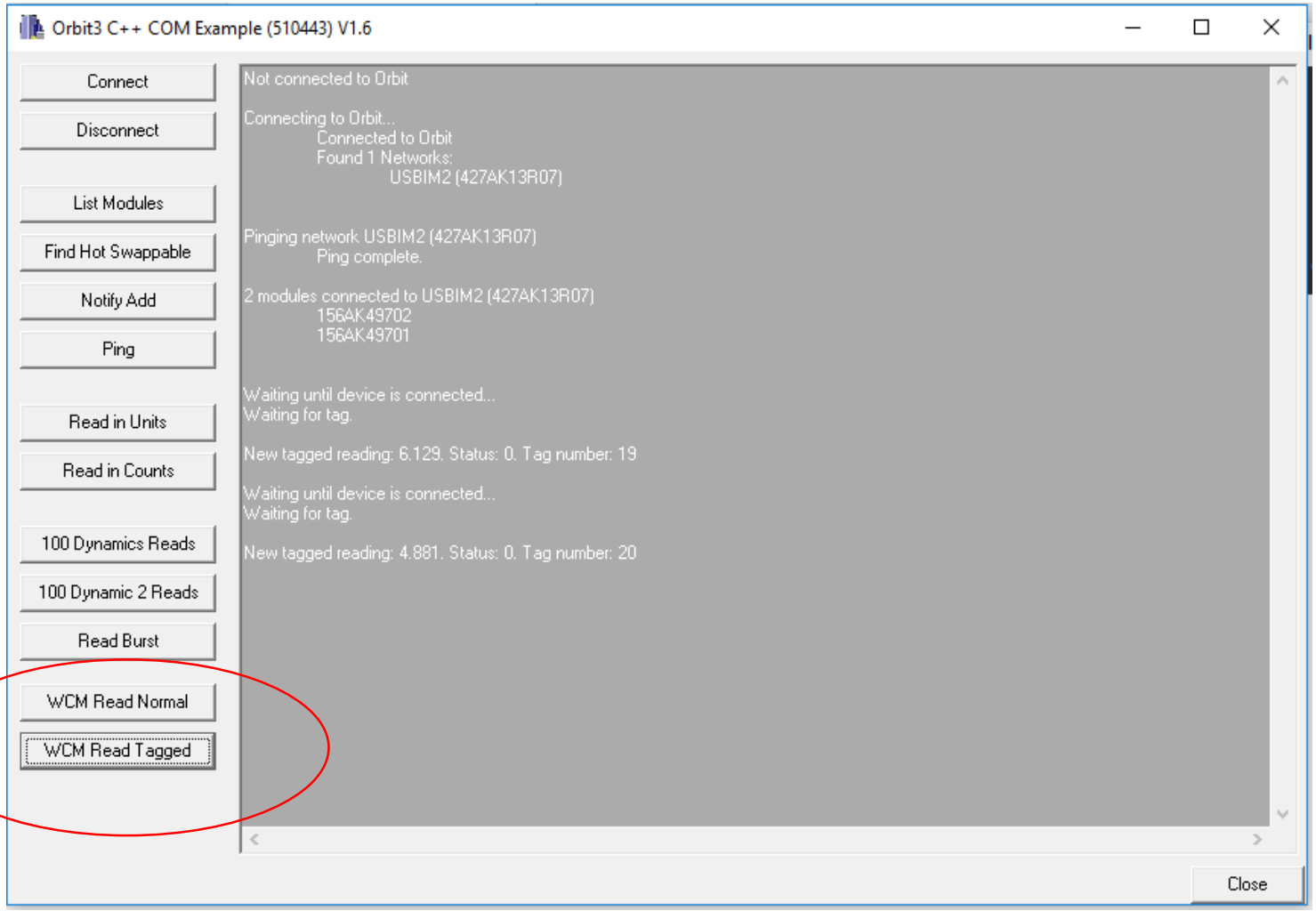
Programming Examples in C++ and Visual Basic



Sales and Marketing Information – External Communication BLOG

Solartron Metrology

Blog Post

Title: Wireless Sensor Connectivity Made Easy

Publish date: 8/5/18

Post:

Being at the forefront of new measuring technology means creating products and systems that are not only innovative but also meet the needs of OEMs (Original Equipment Manufacturers). When our customers requested the ability to connect multiple wireless sensors to a PC via Bluetooth at the same time, we went to work to provide a fitting solution, while also adding other useful features to provide an all-round convenient and easy-to-use control module.

<h2>Increased sensor connectivity</h2>

The latest product to join our range, the Wireless Connectivity Module helps customers who need to use multiple wireless sensors simultaneously, rather than being restricted to just seven, as was the case before.

Increasing the capacity for connectivity solves the issues of customers having to continuously swap sensors in and out - a both inconvenient and ineffective use of time. As the Wireless Control Module works with our Orbit Digital Measurement Network, manufacturers now have limitless connectivity. While six sensors can be connected to the Wireless Control Module at any one time, as many control modules as are needed can be connected to a PC using the Orbit network.

<h2>Reliable connectivity</h2>

Connecting sensors directly to a PC relies on the PC's Bluetooth drivers, which can potentially be unreliable and lead to a loss of connection during operation. Solartron's Wireless Control Module has been designed with reliability on both sides of the Bluetooth connection as a priority. Also, as the Control Module connects to the computer through a wired connection, a PC with a Bluetooth connection isn't required, nor is a third party Bluetooth dongle.

<h2>Easy to Access Data</h2>

The Wireless Control Module's integration with the Orbit Digital Measurement Network means the sensor data is very easy to access, as Orbit interfaces with Microsoft Excel, while the control module's user software interfaces with Orbit. The control module can be connected to Orbit alongside other Orbit products without having any detrimental effect on the performance of the network. This enables the user to access as much measurement data as is required from any number of sensors, simply and easily from a single location.

For anyone using multiple wireless sensors, the Wireless Control Module is a useful way of connecting multiple sensors to a PC with a stable and secure connection. In conjunction with the Orbit Digital Measurement Network, the Wireless Control Module is easy to use and the data it produces is easy to access.

Our expert team are on hand to discuss how the Wireless Control Module, Orbit Digital Measurement Network and all of our products could work for you, or could be adapted and customised for your requirements. Call us now on (0)1243 833333 or email sales.solartronmetrology@ametek.com.

Sales and Marketing Information

- External Communication Mail Shot will be sent out
- Website is updated with Data Sheet and Product Page under Wireless

WCM Questions?

- Can a WCM be used with an Orbit ACS Module or any Solartron readouts?
  - *Answer: No. It will only work with Orbit3 .NET Driver Software.*

- Can the WCM connect with the Wireless Multi Channel Handtool?
  - *A: Yes*

- Can a WCM run with the Protocol Interface Module (PIM)?
  - *A: Not yet. This is planned for the future*

- Can you change settings of the Wi Gauge handle through the WCM?
  - *No. You can only do that through the Wireless Handtool Manager. To add that capability to the WCM and Orbit would take several months of programming.*