The CybatiWorks® scalable academic and professional control system cybersecurity platform enables educational institutions, industrial asset owners / operators and supporting entities to quickly understand control system environments and cybersecurity risks. The portable and complete training platform has been validated by hundreds of industry practitioners. The educational platform engages the student in understanding, enumerating, exploiting and mitigating the engineering workstation, HMI, OPC, Historian, PLC/PAC/IED/R(M)TU and ICS protocols. The educational platform is encompassed by three primary components

- Virtualized operating systems utilizing VMWare® based Linux operating systems serving as Historians, OPC Servers and HMIs;
- Embedded devices such as the Raspberry PI platform and common off-the-shelf industrial components providing logic and physical I/O;
- Kinetic I/O models such as a traffic light, robotic arm, and assembly line

The components are modular and extensible allowing the CybatiWorks® Mini Kit and Industrial Edition platform to compliment each other. The mini kit is affordably priced as a participant retainable platform complimented with the instructor's industrial edition kit. Elements contained within both kits can be swapped to associate the mini kits with the more expensive industrial software and components.

The CybatiWorks® Cybersecurity platforms are leveraged in the CYBATI Critical Infrastructure and Control System 5-day course and CybatiWorks® Blue, CybatiWorks® Red and CybatiWorks® One exercises.   The Industrial Edition utilizes the same VMWare® Linux virtual machines as the Mini Kit in addition to a fully licensed Microsoft® Windows 7 virtual machine with licensed control system applications. The Industrial Edition platform I/O quick-connect is expandable to the participant's mini kits to easily associate supplemental environments. This quick association allows the participants to relate the mini kit to real industrial application and devices.
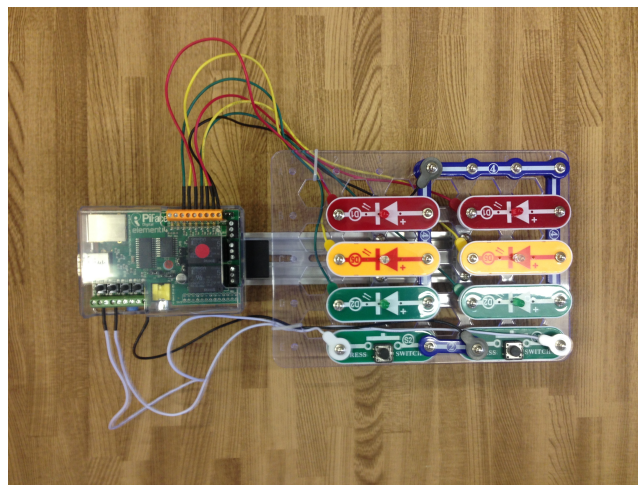

Figure 1. CybatiWorks ICS/ IoT Mini Kit