Opto 22 announces *groov* EPIC firmware version 2.0

The latest groov EPIC firmware adds support for multi-signal, multifunction Ethernet-based groov RIO edge I/O and updates many embedded applications

Temecula, CA - May 5, 2020 – Today, Opto 22 announced the second major version of its firmware for *groov* EPIC®, the edge programmable industrial controller for automation applications and the industrial internet of things (IIoT). The *groov* EPIC 2.0 firmware includes updates to both of *groov* EPIC's real-time control engines and provides an under-the-hood refresh to many ecosystem components. This update also increases the reach of the control platform with support for *groov* RIO®, Opto 22's new industrial edge I/O module, which supports 61,260 unique I/O combinations in a standalone unit.

With *groov* EPIC 2.0, Opto 22's PAC Control™, a flowchart-based, multi-tasking control engine, is updated to version R10.3a; and 3S Software's CODESYS® Runtime, an IEC 61131-3 compliant runtime engine, is updated to version 3.5.15.10. Both control options are capable of executing user-configured, high-speed, closed-loop control programs for process control, manufacturing, and OEM machines. In combination with the jointly updated design software—PAC Project™ Suite 10.3 and Opto 22's CODESYS Library Package 2.0.0.0, which is compatible with the CODESYS Development System v3.5 SP15—these updates allow the number of *groov* EPIC I/O points to be expanded with an **unlimited number of *groov* RIO remote I/O modules**. Each *groov* RIO module is an independent edge I/O unit that can sense and control a wide variety of traditional wired I/O signals or devices from anywhere on a connected Ethernet network.

groov RIO modules accept a software-configurable mix of analog inputs (volt, millivolt, milliamp), temperature inputs (ICTD, TC), discrete and powered switch inputs, analog outputs (volt,

milliamp), discrete outputs, and normally-open or-closed relay outputs. Each module is also capable of executing up to four PID loops independently of the EPIC controller.

Direct interoperability between the *groov* EPIC system and the new *groov* RIO modules gives engineers, technicians, and developers more options for **distributed and direct-to-cloud I/O processing**. In addition to communicating I/O signals to the EPIC, each *groov* RIO module provides basic and advanced I/O signal processing, database transaction capability, and communications with other control systems, web services, and cloud IoT platforms, independently of *groov* EPIC. Both *groov* RIO and Opto 22's field-proven SNAP I/O system are compatible remote I/O with the *groov* EPIC 2.0 firmware.

With *groov* EPIC 2.0 and *groov* RIO, applications like remote condition monitoring, building management systems (BMS), and data center infrastructure monitoring (DCIM)—applications that need to move many real-world signals into on-premises or cloud-based software—become easier than ever before, **simplifying the complex technology stack** and cross-functional skillset previously required for these applications.

The update rounds out this significant platform expansion with upgrades and improvements to many basic system components, providing better user management controls, more flexible serial device detection, and more stable VPN and MQTT performance. Third-party applications are also updated, including Ignition (7.9.13) and Node-RED (1.0.3). As a final note with this release, Opto 22 has added the popular, open-source Mosquitto™ to its cryptographically signed repository, providing users a proven, no-cost option for adding an MQTT broker to *groov* EPIC.

Availability

***groov* EPIC firmware 2.0** is available now for all current users through manage.groov.com. Complete upgrade instructions are available in the *groov* EPIC User's Guide. For new customers, all *groov* EPICs now ship with this latest firmware version.

PAC Project Basic 10.3 and the Opto 22 Library Package for CODESYS 2.0.0.0 are also available as free downloads.

About *groov* EPIC

groov EPIC is an edge programmable industrial controller (EPIC). More than a PLC, PAC, or PC, it is a Linux®-based processor in a compact industrial enclosure, with local and remote I/O and

wide-ranging programming and communications options. In addition to real-time control, *groov* EPIC provides the connectivity many of today's projects require: it connects to field sensors and devices, legacy PLC systems, software applications, remote equipment, and cloud services for anything from weather conditions to big data analytics and predictive maintenance.

About Opto 22

Opto 22 designs and manufactures industrial control products and Internet of Things platforms that bridge the gap between information technology (IT) and operations technology (OT). Based on a core design philosophy of leveraging open, standards-based technology, Opto 22 products are deployed worldwide in industrial automation, process control, building automation, industrial refrigeration, remote monitoring, and data acquisition applications. Designed and manufactured in the U.S.A., Opto 22 products have a worldwide reputation for ease-of-use, innovation, quality, and reliability. For over 40 years OEMs, machine builders, automation end-users, and information technology and operations personnel have and continue to trust Opto 22 to deliver high-quality products with superior reliability. The company was founded in 1974 and is privately held in Temecula, California, U.S.A. Opto 22 products are available through a global network of distributors and system integrators. For more information, contact Opto 22 headquarters at +1-951-695-3000 or visit www.opto22.com. Follow us on Instagram, Twitter, Facebook, LinkedIn, YouTube.

###