



groov RIO EMU

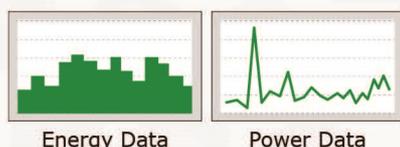
arrowfinch
IOT Simplified

OPTO 22
Your Edge in Automation.™

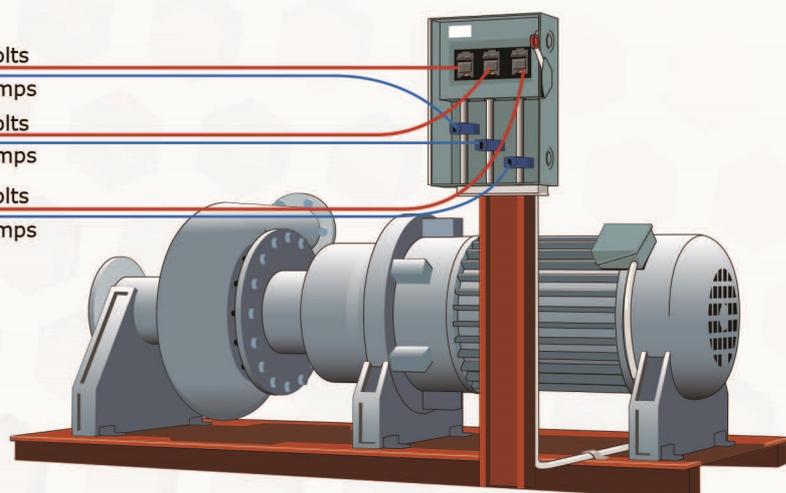


groov[®] RIO EMU

ENERGY MONITORING UNIT



Volts
Amps
Volts
Amps
Volts
Amps



Use groov RIO EMUs in two ways:

As an edge energy monitoring unit, communicating data between loads and data destinations.

- Push data directly to on-premises or cloud apps, databases, or other software, typically using the included Node-RED
- Publish data to an MQTT broker
- Respond to Modbus/TCP requests for data
- Configure with browser-based *groov* Manage software
- Manage local user accounts and permissions, or from a central location through an LDAP server
- Access PAC control strategy tags, I/O data, and PID control info via native OPC UA server

As a traditional energy monitoring unit, configuring channels through your control program:

- With a *groov* EPIC processor running a PAC Control strategy; add a *groov* RIO EMU as an I/O unit
- With CODESYS applications:
 - As part of a larger energy monitoring system: download and install the Opto 22 CODESYS Library Package to the CODESYS Development System, then add a *groov* RIO EMU as an Ethernet device.
 - As a stand-alone energy monitoring and control unit: enable the on-board CODESYS runtime engine (requires purchase of GROOV-LIC-CRE-RIO), download and install the Opto 22 Library Package for CODESYS, build your control program, and run it on the *groov* RIO EMU.
- With a custom control program through either *groov* RIO's OptoMMP memory map, its REST API, or through secure shell access (requires free GROOV-LIC-SHELL license)