

## PROGRAMMABLE CONTROLLERS | RPC-80x

**Control and monitor single/multi-sensor systems in severe or hazardous conditions.**

The RPC-80x is a next-generation Rugged Programmable Controller (RPC) designed for advanced signal processing and dependable performance even in the most demanding environments.

Its intuitive onboard programming and configurable inputs/outputs support a wide range of measurement types, including tension, torque, weight, and pressure, and its high-visibility display ensures clear readouts regardless of light, angle, or weather conditions.

Engineered for versatility and performance, the RPC-80x fits seamlessly into both new and retrofit projects.

### FEATURES & BENEFITS



- ▶ **Electroluminescent (EL) display** offers bright and clear visibility at angles up to 179°.
- ▶ **Heavy-duty 316 stainless steel** front panel with five fully-sealed, tactile buttons for superior durability to withstand harsh environments.
- ▶ **Onboard browser interface** allows for remote measurement viewing, remote access and control, downloading internal data files, and upload/download of settings profiles. Firmware can be upgraded via USB.
- ▶ **Real-time data** available to users and other Rugged Controls devices via RS-485, RS-232, and (1) ethernet port. Data logging options for USB and PC applications.
- ▶ **Full programmability** via English language menus. Configurable measurements, alarms, and any other standard setting. No custom firmware required. 4 key functions configurable from menu system provide ultimate flexibility for operators.
- ▶ **Multiple sensor input channels (rotational, analog, and digital)** support high-level and strain gauge analog inputs and a variety of serial or ethernet enabled sensors. Configurable counter input channels are available for quadrature, pulse, or sinusoidal signals.



- ▶ Configure up to three run-time screens and easily toggle between screens with front panel button.
- ▶ Employ mathematical functions to measurements for streamlined calculation of sum, average, and peak data.
- ▶ Timestamp measurements and alarms to ensure reporting accurate and automated reporting.
- ▶ (2) Relays and analog outputs for safety, control, and third-party integration.
- ▶ (2) Digital inputs with functions that are easily menu selectable.
- ▶ Optional data logging and report generating software available.
- ▶ RPC-LINK protocol allows connection between RPC-90x or 80x products for seamless data exchange.
- ▶ Network configurable data ports. High speed data capture up to 1000 Hz.

## SPECIFICATIONS

<b>Display</b>	160x80 resolution. Electroluminescent (EL).
<b>Enclosure Size</b>	Height: 3.9" x Width: 5.6" x Depth: 2.5".
<b>Panel Cutout</b>	Height: 3.55" x Width: 5.27"
<b>Operating Temperature</b>	-40° C (low threshold) to 70°C (high threshold).
<b>Environmental</b>	Waterproof front panel with silicon mounting gasket.
<b>Power</b>	9-36VDC, 8W, fused/filtered. Surge protected.
<b>Analog Input High Level</b>	2 channels   4-20mA 0-5VDC, 0-10VDC, ± 5VDC.
<b>Analog Input Low Level</b>	1 channels   Load Cell: 5/10 VDC Excitation, 0-20/0-100mV.
<b>Analog Output</b>	2 channels   4-20 mA, 0-5VDC, 0-10VDC, ± 5VDC.
<b>Sensor Excitation</b>	Regulated +5/+12/+24VDC. 0.5A.
<b>Count Input</b>	Quadrature, 1x, 2x, 4x. Inductive proximity (Hall Effect). Count direction. Up/down. 30kHz bandwidth.
<b>Output Relays</b>	(2) SPDT, NO-NC. 125VAC 60VDC @ 1 Amp.
<b>Digital Input</b>	2 channels   0-60VDC, trigger level: 2.5V. Functions are menu-selectable.
<b>Serial Communication</b>	RS-485, isolated, 2 wire. RS-232, USB, non-isolated.
<b>Alarms</b>	Measurement parameters high and low set-points (any measurement). Accessible via front panel menu interface: filtering, delay, deadband, adjustments.
<b>Ethernet</b>	Ethernet: 10base T, TCP/UDP.

