

The ROC306 and ROC312. Small in size. Big in performance.

Power for the Toughest Applications. The ROC306 and ROC312 Remote Operations Controllers (ROCs) are powerful microprocessor-based remote measurement and control devices. They are ideal for low to medium point-count applications requiring sophisticated measurement and control capability. They incorporate many outstanding features that make them easy to use, easy to customize to the application, and cost-effective for current and future needs.

Easy to Use. The ROC306/ROC312 feature versatile firmware that makes complex calculations, like those for gas flow measurement, simple to implement. Both AGA orifice and turbine metering calculations are pre-programmed. Likewise, sophisticated PID loop control and logic sequencing control schemes can be implemented without programming.

The operating system and applications firmware reside in a FlashPAC memory module and can be quickly updated on-site using a laptop computer.

Easy to Integrate. The ROC306/ROC312 offer integrators a choice of native ROC, MODBUS, or custom communication protocols for seamless integration into new or existing automation systems. Polled, spontaneous report-by-exception, peer-to-peer, and master-slave communication strategies can be implemented.



The ROC306 and ROC312 Remote Operations Controllers.

The ROC306/ROC312 is supported by popular host software packages from companies such as Cygnet, Intellution, Standard Automation, US Data, and Wonderware.

Supported by ROCLINK™. The ROC306/ROC312 can be configured and operated on-site using our Windows®-based ROCLINK software package. ROCLINK runs on almost any laptop or desktop personal computer and uses a simple fill-in-the-blanks approach to configuration.

Remote Automation Solutions

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Modular and Expandable. Modular design lets the ROC306/ROC312 adapt to your changing needs. Six I/O points are built-in to each unit, and the ROC312 can accommodate six additional I/O points using plug-in single-point modules. Both units can interface to HART® devices using an optional HART interface card. A HART interface module can also be used with the ROC312 in place of the card.

An optional Remote MVS Interface card allows up to three remote multi-variable sensor units to be connected to a ROC306/ROC312. It also provides an additional EIA-232 communications port.

In addition to a standard operator interface port, a plug-in communication card extends your communication options to a host, other ROCs, or to specialized equipment. EIA-232, EIA-422/485, radio modem, leased-line modem, or dial-up modem options are available.

Proven Technology. Low power consumption and a wide operating temperature range make the ROC306/ROC312 ideal for solar-powered installations. Built-in self diagnostics and a watchdog timer keep you informed of each unit's operating status and help protect your application.

Ruggedness is a requirement for field equipment and these units meet the challenge with their heavy-gauge steel enclosures, MIL-SPEC circuit boards, and gold-plated connectors. Limited surge protection is provided on both built-in and modular I/O, and on communication cards as well. Plug-in lightning protection modules are available for each I/O point.

Exceptional Value. The ROC306/ROC312 offer you exceptional value in terms of high return on investment, reduced product obsolescence, and flexibility to meet future needs.

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Specification Summary.

Input/Output

ROC306/ROC312: Built-in I/O points of the following type: 3 analog inputs, 2 discrete/pulse inputs, 2 discrete outputs. Optional HART® interface for analog inputs.

ROC312 Only: 1 to 6 I/O modules can be accommodated, mixed or matched by these types: discrete input and output; analog input and output; pulse input; RTD input; relay output; HART® interface.

Communications

Ports: One EIA-232 port for the operator interface is standard. One additional port is available using a plug-in card of the following types: EIA-232, EIA-422/485, radio modem, leased-line modem, dial-up modem.

Protocols: ROC and Modbus are supported. Custom protocols are available.

Applications

- AGA gas measurement for 3 meter runs.
- PID loop control with override for 6 loops.
- Logic/sequencing control using up to 4 function sequence tables (FSTs).

Compliance

AGA-3 and AGA-8 (version 1992);
AGA-3 and AGA-8 or NX-19 (version 1985);
AGA-7.

Approvals

- Approved by CSA for hazardous locations, Class 1, Division 2, Groups A, B, C, and D.
- Approved by Measurement Canada for custody transfer (Canadian version).

Dimensions

8.88 inches high by 8 inches wide by 3.5 inches deep (225 mm by 203 mm by 89 mm).

Operating Conditions

Input Power: 8 to 30 volts dc. 1 watt typical power consumption excluding I/O modules.

Operating Temperature: -40 to 167 degrees F (-40 to 75 degrees C).