

Part Number D301217X012

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ROC800-Series Remote Operations Controller Instruction Manual



ROC809



ROC827

² With firmware version 2.10 or greater

³ The ROC827 supports a maximum of two MVS modules

⁴ With firmware version 3.10 or greater

⁵ With firmware version 3.20 or greater

Note: For further information, refer to the technical specification *ROC800*. For further information on compatibility and migration issues, refer to the *Remote Automation Solutions Technical Support White Paper WP0800004R1*.

1.3 Hardware

The ROC809 and ROC827 are highly innovative and versatile units with an integrated backplane to which the central processor unit (CPU), power input module, communication modules, and I/O modules connect. The ROC809 (see *Figure 1-1*) has nine module slots, of which three can house communication modules. The ROC827 base unit (shown on the left-hand side of *Figure 1-2*) has three I/O module slots.

The ROC800-Series expansion backplanes (EXPs) attach to the ROC827 base unit (see *Figure 1-2*). Each EXP provides six additional I/O module slots. The ROC827 can support up to four EXPs, for a total of 27 I/O module slots (six slots per EXP plus the three I/O slots on the ROC827 base unit).

The ROC800s use a Power Input module to convert external input power to the voltage levels required by the electronics and to monitor voltage levels to ensure proper operation. Three Power Input modules—12 Volts dc (PM-12), 24 Volts dc (PM-24), and 30 Volts dc (PM-30)—are available. For more information on the Power Input modules, refer to *Chapter 3, Power Connections*.

The ROC800s support a variety of communication protocols: ROC Plus, Modbus, Modbus TCP/IP, Modbus encapsulated in TCP/IP, and Modbus with Electronic Flow Measurement (EFM) extensions.

Figure 1-1 shows the housing, typical I/O modules, and communication modules installed in a ROC809. The patented ABS (Acrylonitrile Butadiene Styrene) plastic housing has wire covers to protect the wiring terminals. The housing includes DIN rail mounts for mounting the unit on a panel or in a user-supplied enclosure. Patent 6,771,513 covers the ROC800 enclosure (refer to www.uspto.gov).