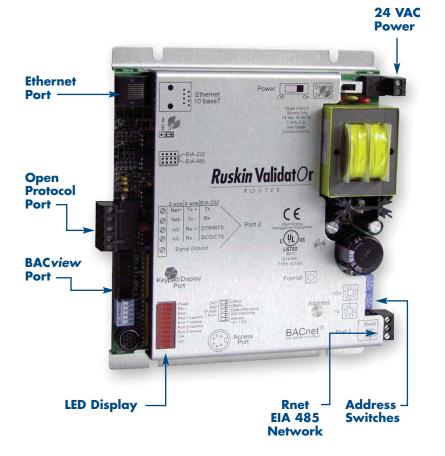
# *Ruskin* Validat*O*r

# **GATEWAY/ROUTER**

Ruskin, the HVAC industry's leading fire/smoke damper manufacturer, brings you the latest in fire/smoke damper technology. Ruskin Validator is a testing and maintenance System that includes the industries **first** fire/smoke damper integrated with communication capabilities. The Ruskin Validator System was developed to ensure HVAC life/safety systems provide protection for the life of the building. Because failures are unpredictable, periodic testing and verification of proper operation is vital to keep life/safety systems functioning properly. The *Ruskin Gateway/Router* is the "brains" of the Validator System. It functions as a supervisory controller and allows communications interface between the Ruskin Smart Damper Controller (RSDC) and the building management system (BMS). The Gateway/Router can be configured to route communications between various combinations of Ethernet, EIA-232, and EIA-485 networks. It can provide seamless translations for two-way communications between industry standard protocols such as BACnet, Modbus, LonWorks, or Johnson N2 Bus protocols. The Gateway/Router ships factory installed in an enclosure for easy mounting.



# **ADDITIONAL FEATURES & BENEFITS**

- Open protocol port supporting
  Johnson N2 Bus, BACnet, MODBUS,
  - LonWorks, etc
- Ability to change protocol without replacing or adding hardware
- Ethernet connection supports LAN and World Wide Web applications
- Accessible through standard Internet browser
- Addressable to support multiple gateway/routers and multiple on-site and off-site locations
- BMS/BAS communication port supporting EIA 232 or EIA 485 networks
- LED status display of communication, run/stop, errors and power on/off

## ENGINEERS & ARCHITECTS VALIDATOR SYSTEM SPECIFICATIONS

Fire and smoke damper testing and maintenance system meeting the following specifications shall be furnished and installed where shown on the plans and/or described in schedules. The testing and maintenance system shall be comprised of three components; a damper controller for each damper, a gateway/router for each 99 controllers and a keypad/display through which the testing and maintenance system can be accessed. The testing and maintenance system shall also have the optional capability to connect to the Internet and be accessible via the world wide web.

The damper controller shall be factory installed in an easy access wall mount enclosure. The enclosure shall contain a pre-wired terminal with spade connectors on board for easy electrical connection to a local 120VAC power supply. The controller shall be UL 268A listed, addressable, and shall be capable of being connected to other controllers and the router using low voltage communication wiring via a EIA485 serial port. The communications wiring shall be flexible for routing and shall be twisted pair shielded cable.

The gateway/router shall be UL 916, CSA and CE listed and shall accept up to 99 controllers. It shall be factory mounted in an enclosure with the keypad/display for easy installation. The gateway/ router shall include one Ethernet port, one open protocol port configurable for EIA-232 or EIA-485 and one EIA-485 serial port. The gateway/router shall be capable of seamless integration using a local area network (LAN), open protocol port and/or connection through a server to the Internet and accessible via the world wide web.

The keypad/display shall be UL 916, CSA and CE listed and (if used) shall be factory mounted in an enclosure with the gateway/router. The keypad/ display shall allow the user to perform or initiate testing, view operation and view/reset alarms.

The fire and smoke damper testing and maintenance system shall continuously monitor each fire and smoke damper to verify that the damper is open. The system shall alarm if a damper closes for any reason other than a test or if a smoke detector, used in conjunction with the damper, goes in to



3900 Dr. Greaves Rd., Kansas City, MO 64030 (816) 761-7476 Fax (816) 765-8955 Email: ruskin@ruskin.com alarm or if a damper fails to go full open or full closed. The system shall allow tests to be fully automated or manually performed through the keypad/display unit. Automated tests shall have the capability of being varied to meet local requirements. Dampers shall be tested one at a time with a minimum one minute time delay between each damper test to avoid havoc in the building. The fire and smoke damper testing and maintenance system shall be the Ruskin Validator System.

### GATEWAY/ROUTER SPECIFICATIONS

#### Power

Panel, 120VAC, 7.6VA Control Module, 24VAC, 50/60Hz, 7.2VA

#### Communication

One (1) Ethernet Port One (1) Serial Port Configurable for EIA-232 or EIA-485 One (1) Rnet EIA 485 Network

#### **Environmental Operating Range**

0°F to 130°F, 10% to 90% relative humidity non-condensing

#### Status Indication

Visual (LED) status display of communication, run/stop, errors and power on/off

#### Memory

1MB flash memory 2MB non-volatile battery-backed RAM (stores data even during a power failure)

#### Protection

Voltage, current and ESD protection on incoming power and Rnet

#### Battery

Seven (7) year lithium BR2325 battery provides a minimum of 10,000 hrs of data retention during power outages

#### Approval

UL 916, CSA and CE

#### Mounting

Factory mounted in hinged door UL approved NEMA 1 rated enclosure

#### Dimensions

Router – 7-1/8" W x 6" H x 2-3/4" D (18.1 cm W x 15.2 cm H x 5.1 cm D) Enclosure – 12" W x 12" H x 4" D (30.48 cm W x 30.48 cm H x 10.16 cm D)

